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TAX COMPETITION AND ITS IMPLICATIONS FOR SOUTHERN  
AFRICA

by

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AFRICA**

*Dedicated to my loving husband, Peter, and my dear Mother. This dissertation is also dedicated to the memory of my dear and beloved Father who devoted his life to his profession as teacher.*



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*Grote God, aan U al die eer en verheerliking.*

PRETORIA

NOVEMBER 2002

ZURIKA CLAUSEN ROBINSON

**ABSTRACT****TAX COMPETITION AND ITS IMPLICATIONS FOR SOUTHERN AFRICA**

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The purpose of this study was to evaluate the implications of tax competition with specific reference to commodity and capital income taxation. From a theoretical perspective, tax competition can be explained as a process that involves various measures or strategies that governments can take on the same but also different levels to adjust their tax bases and/or rates (tax systems), in order to attract mobile factors of production from other regions. The alternative of tax coordination and harmonisation to tax competition, as applied in developed regions, and partial pursuit in some developing regions was also analysed. Theoretically under normal circumstances without any external shocks, an uninterrupted tax competition of any kind, with tax coordination as supplement should provide the optimum results in terms of price and efficiency. However, experience in developed regions has shown that a higher degree of discretionary power to national authorities in decision-making, and an overall coordinated approach are efficiency enhancing. The welfare gains from tax competition are also not always obvious, and continued tax reform efforts in the SADC region should include definite coordination efforts. After giving a general background to the Southern African situation, tax competition was therefore discussed as part of a broader fiscal and macroeconomic policy in order to reach specific macroeconomic targets - targets such as economic growth, price, public deficit and debt stability. A significant and sustained tightening has become necessary in terms of fiscal policies, and in most cases the fiscal position is incompatible with regional trade liberalisation objectives. Overall structural reform in Southern Africa had thus become urgent, even more so than the benefits arising from a higher degree of regional integration in terms of trade and investment. A comprehensive strategy which included macroeconomic convergence

criteria, were therefore designed in this study for future utilisation with the emphasis on a balanced commodity-capital income tax approach. This strategy also included a significant reduction in the use of tax incentives (quality rather than quantity incentives). These incentives, which have been used inconsistently in the past, have therefore not reached its essential goal of attracting a higher percentage of foreign direct investment (FDIs) to Africa. Together with the coherence and suitability of tax principles, the above-mentioned measures of improvement could attract recommended FDIs and secure future government revenue. If not applied, Southern Africa could soon find itself in the predicament of a “disappearing” tax base.

University of Cape Town

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## **CHAPTER 1**

### **INTRODUCTION AND PROBLEM STATEMENT**

“The more people connect, the smaller the world becomes”. If only Alexander G. Bell could see the ultimate realisation of his dream...

#### **1.1 THE MEANING OF TAX COMPETITION**

Finding a short and concise definition of tax competition has become more complex than originally planned in this study. This field of study is in fact so vibrant and ever changing and covers so many fields of economics as subject matter that one general definition would not do it justice. Hence the definition(s) utilised here are merely to provide a short and simple indication of what was originally meant by tax competition.

In simple terms, tax competition includes the welfare effect of one country's tax policy when goods and/or factors of production are traded internationally. It therefore deals with various measures or strategies that can be taken by governments on the same or horizontal level but also different or vertical levels to adjust their tax rates or reconsider their tax systems (especially tax bases), in order to attract mobile factors of production from other regions. Tax competition therefore does not only occur through the lowering of tax rates, but also from changes or distortions in tax bases that are less visible and more difficult to assess. Mobile tax bases include income from sales and services (commodities), income and assets from labour, income from rentals and royalties, income from portfolio capital (interest income), and income from corporate profits or investment capital. Although labour has become far more mobile with technological advancements such as the Internet playing a significant role (Bishop 1999), some major obstacles to the movement of individuals across international boundaries still exist<sup>1</sup>. Obstacles such as visas, special work permits and the accreditation of degrees, diplomas, and other qualifications remain problematic. Capital, and in this case portfolio capital followed by direct or fixed investment capital, is therefore still regarded as the most mobile factor of production. Even Adam Smith (1776) acknowledges that capital has never been the “citizen of any country”.

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<sup>1</sup> Although approximately 120 million people found themselves outside their countries of birth in 1997 (UNDP 1997), these individuals are normally professionals who are rated as highly skilled human capital that seem to have far less difficulty moving around.

Economic globalisation in conjunction with regional integration has led to various tax breaks for mobile capital and technological change has made it difficult to tax capital (Gordon 1992). The conventional view has always been that, if capital is mobile, tax competition will lead to a downward pressure on tax rates as well as an overestimation of the social marginal cost of public funds (SMFC) - additional revenue raised in one country as a result of tax increases in another will therefore be disregarded. This in turn will result in an inadequate supply of public services. Over time, individual countries have therefore lost some of their autonomy with respect to the setting of capital tax rates and as such have become more dependent on immobile tax bases for income, such as land and domestic labour. Ricardo (1817) goes further and reiterates that the expected future tax burden accompanying a high public debt would induce the rich and their capital to emigrate rather than to save. The so-called “Ricardian equivalence” of debt and tax finance is therefore ironically rejected.

In summary, the international mobility of capital means that investment decisions have become more sensitive to tax differentials. However, this sensitivity of investment decisions also covers other cost factors such as commodity taxation within a country or regional grouping such as the European Union (EU). Commodity and capital tax differentials may therefore encourage competitive bidding between governments but not without taking into account the equilibrium and arbitrage conditions set forth by a market economy (Frenkel, Razin & Sadka 1991:203). Within the setting of this market economy, the study at hand will concentrate on the implications of capital and commodity tax competition on a national as well as an international basis.

### **1.1.1 Background to tax competition**

Although tax competition has always existed, not only at international but also at subnational level, it especially gained ground as field of study in the 1980s. During the 1980s, tax competition was triggered by several industrialised countries' tax policy and reform efforts. Major changes were first introduced in June 1981 in the early years of the Reagan administration under the Economic Recovery Tax Act. Besides significant tax reductions, more importantly, a new accelerated depreciation system (the Accelerated Cost Recovery System or ACRS) and an investment tax credit (ITC) were introduced. In contrast to the popular belief of supply-side economists that tax reforms of this type ought to have an enhancing effect on direct investment and economic activity in general, Sinn (1987:145) argued that the tax reforms in the US had detrimental effects on the rest of the world (the so-called “investment or taxation paradox”).

The paradox can be explained by the fact that the combination of the ACRS and ITC provided tax benefits which, in real present value terms, were roughly equivalent to expensing (immediate write-off of investment) at the inflation rates prevailing in 1981. This was more than generous to compensate for the erosion of depreciation allowances caused by inflation. Economic activity and tax collections did not rise sufficiently to offset tax cuts and large budget deficits developed. Investment increased as expected and the US immediately became a capital importer<sup>2</sup>, although public and private savings simultaneously decreased. This gap could only be filled by the inflow of foreign capital. A combination of tight monetary policy and loose fiscal policy created high interest rates which, together with investment incentives, attracted capital. The dollar also appreciated. These events can be summarised by the derived identity:  $(G-T)+(I-S)=(M-X)$ . In this sense the US followed a beggar-thy-neighbour policy by providing huge investment incentives to their industry through the ACRS but in an unconventional way<sup>3</sup>. The 1981 tax policies worsened the short-run competitive position of the US instead of improving it and the fiscal expansion significantly overvalued the dollar.

Besides the tax reform efforts in the US, 18 out of the 24 member countries of the OECD reduced their key central government corporate tax rate between 1986 and 1990 (OECD 1990). These countries included Germany (by 6 percentage points on retained profits but not distributed profits), France (8 percentage points) and Japan (5,5 percentage points). Smaller industrialized countries also reduced their statutory corporate tax rates with Sweden, for example, cutting its central corporate tax rate from 52% to 30% after 1991. The average corporate tax rate among OECD countries dropped after 1995 to an overall 34,8% in 1999. More recently, countries such as France and Germany have announced further individual income and corporate tax rate cuts, with the top income tax rate in France set to decrease from 54% to 52,5% by 2003, Germany's rate to 42%, and the UK's that is already 40%. The process of tax reductions is therefore ongoing in the new millennium in order to adjust to continuing global changes such as regional integration. It needs to be emphasized that the degree of capital mobility changes over time, both because of changes in "technology" (including, for instance, changes in communication and transportation technology, and associated changes in business management and organisation) and because of changes in policy (liberalisation of capital controls, international commercial agreements, etc.).

2 The term "investment or taxation paradox" refers to the fact that it may become necessary to increase tax rates in order to increase capital exports and/or investment.

3 The conventional way in the 1930s was to devalue the currency in order to create a current account surplus.

### 1.1.2 The importance of tax competition

Another obvious question concerns the reason why tax reduction strategies have been and are still being used? Before answering this question, it is necessary to study the background. In the last 45 years, international experience has to some extent demonstrated that capital markets have been characterized by secrecy laws and capital controls (also see World Bank 2000). This trend has been reinforced in Europe by the internal or single market approach, which abolished all remaining capital controls within the European Community, today the European Union (EU). In the period between 1983 and 1995, earnings from FDIs increased by more than 600% internationally, rising (in nominal terms) from less than US\$50 billion in 1983 to almost \$300 billion in 1995 (World Bank 2001). The increase was even larger for foreign portfolio investment and today the total volume of portfolio investment exceeds the volume of international FDIs. These increases are much higher than the growth of world commodity trade, whose volume has approximately tripled since the early 1980s, again emphasizing the importance of capital. Trade in capital is also more heavily concentrated in OECD countries, with about 80% of all FDIs taking place between developed countries. Governments have therefore become much more aware of and intertwined in one another's actions. Mobile resources such as capital can be moved through the "press of a button" and countries have therefore continuously attempted new strategies in order to get a slice of the "capital cake". As already mentioned, tax competition stems from more than capital flows. It has to do with the competitiveness of exports and the movement of labour as well. Many pitfalls to tax competition exist and are not merely activated by the existence of differences in nominal tax rates (Boshoff 1993).

Governments' need to respond more quickly to changes in order to gain the resources already pursued in most cases. For developing countries especially, it has become a strenuous task to keep up with the pace of change. The whole process has become an international "game" of interactions and even clashes in some cases, with clear winners and losers. More than ever before, developing countries have to find ways and strategies to improve their competitive position in the global marketplace. The challenge to these countries, however, is to make improvements without depriving their own citizens of the right to much needed public services.

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3 The conventional way in the 1930s was to devalue the currency in order to create a current account surplus.

## 1.2 GLOBAL TAXATION

Apart from various tax rate reductions from 1985 to 1994, the share of tax revenue in the GDP of OECD regions was on average 36,6% (28,2% excluding social security). There was, however, considerable variation from one country (and/or region, eg between the EU and NAFTA) to the next, with the share of tax revenue ranging from 28,9% in Australia to 51,0% in Sweden (OECD 1998a). The institutional frameworks of these countries differ considerably and Europe tends to attach a higher degree of importance to social security than the North American continent. In terms of developing countries, it is noteworthy to mention that tax shares tend to be lower in developing countries than in industrialised countries (see Tanzi 1995). In recent decades, the tax shares in sub-Saharan African countries have on average been higher than in Asia, the Middle East and North Africa (see WoldeMariam 1995). Further, in general, the total average tax level increased only marginally for all subgroups relative to the earlier period. The aforementioned could, for instance, be linked to the determinants of the tax level or burden, which will be partly discussed in section 1.2.1.

**Table 1.1: Comparative levels of tax revenue as a percentage of GDP, 1985-1999**

REGIONAL GROUPS	1985-1994	1995-1999
<b>OECD (TOTAL)</b>	36,6	37,5
NAFTA	26,4	27,0
EU	40,8	41,9
<b>DEVELOPING REGIONS</b>	17,5	18,2
COMESA	18,9	19,9
SADC	24,5	27,6
ASEAN	16,1	17,4
MERCOSUR	17,6	18,0

Sources: OECD (2000a); IMF (2000b).

One determinant generally used, namely per capita income, is normally linked to the level of economic development, and leads to an increased demand in public expenditure and a larger supply of taxing capacity to meet such demands (Musgrave 1969). This determinant and others normally suggest that there is a positive correlation between tax levels and economic development. They also suggest that the direction of causation or influence tends to run from development to tax levels, and not the other way around. Higher tax levels therefore do not

necessarily generate larger distortions that could harm growth in general. It is thus not only about the tax level per se, it is more often than not about additional needs for tax revenue to finance rising public expenditure on development, and thus the ability of revenue authorities to raise the revenue and the way in which they utilise the revenue. In a global society where all governments have to compete on an equal footing regardless of their level of economic development, size or political agendas, it can happen that some countries, especially developing countries, push taxes too low without any regard for public needs. The outcome of low taxes, that is higher levels of capital investment, is also questionable in literature (see next Section). Surely in developing countries, public needs should take precedence over inefficient tax policies that generate uncertain revenues? These issues and other questions will be further analysed and verified in Chapters 5 and 6.

### **1.2.1 Does theory provide explanations for tax burdens?**

The growing concern about tax reform and tax policy issues alone does not necessarily explain the large amount of tax rate reductions worldwide. When considering tax competition, one must accept that governments lower tax rates or use incentives with specific reasons in mind, in this case to attract capital or expand their national business base in other countries, that is export capital. In this study, the assumption is therefore made that taxes have a direct impact on consumption and/or investment and therefore economic growth. As mentioned earlier, a study of tax competition also includes a study of the impact of taxes on different variables, specifically consumption and/or investment patterns and economic growth.

From the earliest times there have been different views on the impact of taxes. Smith (1776) points out that “high taxes frequently afford a smaller revenue to government than what might be drawn from more moderate taxes”. Supply-side economists go further with Bauer (1957) raising concerns about the disincentive effect of taxes on private savings. Please (1967) points out that increased taxes can be eaten up by increased current expenditure and hence yield no increase in public savings. According to Okun (1970:47), tax reductions lead to an added demand by leaving more purchasing power in the hands of consumers and businesses. Extra spending means more jobs and more income for many families; it strengthens markets and encourages greater investment to expand capacity. In contrast to the above-mentioned, Kaldor (1963) and Lewis (1966) argue that increased development is fuelled by increased taxes.



The debate is an ongoing saga with numerous outcomes depending on which assumptions are being used in the different models. It is therefore not always clear whether effective tax rate<sup>4</sup> cuts lead to more investment. A shift in taxes may even occur, say, from capital to labour, and this could have a damaging effect on economic growth. As mentioned earlier, higher tax rates might even be required to increase investment, the so-called “taxation paradox” (Sinn 1987:145). The assumptions made within a study can therefore have a direct effect on its outcome. In this regard it is insightful to discuss one of the best-known theories in terms of tax burdens, namely the Laffer theory.

Although first analysed by Dupuit (1844), Laffer & Seymore (1979:75-79) argues that an optimal tax rate will lie somewhere between a zero and hundred percent tax level and that this level will yield the highest return to government with minimum excess burden to influence total output. A tax cut may therefore give rise to increased government revenue depending on where a country finds itself on the Laffer curve. Although some literature finds that the net impact of a tax rate reduction may be an improvement in government revenue in the long run (Agell & Persson 2001:398-403), the Laffer theory has debilitating assumptions that have to be taken into account. In its dynamic setting the revenue effects resulting from the lower tax rate, need to be studied in terms of the implications with: (1) the assumption that the government sticks to its original consumption and transfers programmes, despite the tax cut boost which may boost the growth rate of output, and/or (2) where governments are committed to maintain their expenditure/output ratios also after the tax cut. Hence a few problems exist in analysing the impact of taxation on different variables.

Firstly, the assumptions made in some studies may be disconcerting and therefore necessitate a study not only of the financing needs but also expenditure realities. Further, although higher tax levels can reduce growth rates in a developing environment, it is extremely difficult to research this systematically and coherently (Newberry & Stern 1987:13). These and other studies emphasise one fact, namely the way in which economic growth is defined and factors that influence it (eg aggregate demand) are of crucial importance if one wishes to proceed with studies of this nature. Thirdly, tax competition is a competition in effective tax rates. Effective tax rates, which are determined by statutory tax rates, the deductibility of interest, depreciation

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4 Effective tax rates on consumption or investment measure the difference between the return before and after taxation when alternative consumption or investment possibilities are available. This can also be interpreted as the average rate of taxation levied on gross income or the GDP, hence taxation as a proportion of the value added.

allowances, special investment incentives and the integration of personal and corporate income taxes, should thus be considered, and this in itself may be problematic. When different types of investment are considered, no general conclusion can be drawn about which country has the highest tax burden (OECD 1991). The effective tax rate for multinational investment is even more complicated. It depends on whether foreign source income is taxed in the host country, or in the home country of residence, or in both. The intricacies involved in the determination of the precise effects of changing taxes and at the same time changes in the tax base, are therefore again recognised (see UNCTAD 1998).

In the absence of a clear prescription from optimal tax theory concerning the “optimal” tax burden for a country, an alternative analysis is utilised in this study. In determining whether the overall tax level of a developing country is “appropriate or sufficient”, a comparative analysis between the average tax burden of a representative group of both developing and developed countries is utilised, taking into account some of these countries’ characteristics (see table 1.1).

### **1.3 THE PROBLEM AND OBJECTIVES**

A study of this kind has various underlying channels that have to be taken into account. Firstly, a study is not sufficient if other countries’ fiscal and therefore tax positions and the possible implications thereof, are not taken into account. Because the EU has globally progressed the furthest with its integration exercise, this grouping is taken as the main example for the SADC. Although not always the best example for development purposes, the future possibility of a merger with transitional economies and the EUs need for social security, like infrastructure and/or social expenditures in the SADC, can deliver some interesting outcomes.

Secondly, a higher degree of world integration with unified currencies has once again become a reality in the new millennium (eg the Euro). This widens the scope for tax competition even more. Taxation therefore remains one of the outstanding unification features and affords countries an opportunity to export part of their tax burden to other countries (Tanzi 1996:20). This opportunity creates the possibility of abuse by some countries, such as the utilisation of tax addresses in tax havens, and MNCs with the financial capacity to utilise tax avoidance methods such as the shifting of their operations or transfer pricing methods in order to lower their tax bill. Further it has become even harder to tax personal income because skilled professional workers has become much more mobile than two decades ago, especially from developing to developed

regions. A lot of these professionals earn a growing slice of their income overseas, and, even if they do become tax exiles, such income is relatively easy to hide from the tax collector. Taxing personal consumption and savings is also harder when these can be easily transferred from one side of the globe to the other. In this regard, the "...vanishing tax payer..." has become a major concern worldwide (The Economist 2000a). It is therefore important to always take taxing authorities' abilities to trace tax avoidance and evasion practices into account. These and other concerns will therefore become part of the developing world as it becomes more deregulated and integrated. Given this changing environment, it is imperative that the kind of taxation and fiscal policy should be continuously monitored – especially in terms of tax competition amongst SADC countries but also towards the rest of the world for future utilisation.

This study therefore has a dual objective. The implications (positive and/or negative) of tax competition for Southern Africa will be discussed and evaluated. In this regard an attempt will be made to start analysing the effect of taxes on investment (foreign and local) in Southern Africa. Existing empirical evidence is therefore included and a first attempt is made to find macroeconomic convergence criteria that will suit the taxation environment and the needs of the region. This will also include the consequences or implications of tax competition for macroeconomic stability in the region. Secondly, the applicability and validity are tested through a comparative investigation of relevant statistics between Southern Africa and other middle-income countries and/or regions, on the one hand, and industrialized countries and/or regions, on the other. Unless otherwise specified, data from the International Monetary Fund (IMF), Organisation for Economic Cooperation and Development (OECD), PriceWaterhouseCoopers (PwC), and the World Bank (WB) are generally used. The analysis serves a sensible purpose in the wake of the Southern African Development Community (SADC) becoming more integrated economically and politically. This investigation should therefore also provide an applicable tax strategy for the region in the long run.

#### 1.4 **METHODOLOGY**

The method of analysis in this study is mainly theoretical with a practical analysis of available data. In a nutshell, this means that a comparative study of the literature is conducted although other resources are also utilised (eg personal interviews). The intricacy of an econometric analysis of taxation coupled with the limitations as already pointed out is recognized but not completely ignored (see section 1.2.1). A thorough summary (ch 2) is therefore provided,

specifically from game theorists who already recognise some of the limitations discussed in this chapter. Besides the above-mentioned intricacies, the limited availability of data in some cases is also recognized. In most cases data were coordinated and integrated in such a way that meaningful international comparisons could be made for a specific year(s).

Besides the difficulties encountered in a study of this sort, a search for empirical proof has increasingly become important specifically in developing countries, and as such a first attempt is made in this study to find some empirical evidence, especially in the Southern African environment. This evidence includes the effects of corporate taxation (and other factors previously recognized) in particular on local and foreign investment and also in terms of tax competition. As a further extension of the study, an attempt is made to formulate some macroeconomic convergence criteria for the SADC after considering all options available in terms of tax competition against expenditure needs.

## 1.5 STRUCTURE OF THE STUDY

The study is divided into seven chapters, including this and the last chapter. The following framework provides a broad outline of chapter 2 and therefore the categories in which tax competition literature can be sub-divided:

- (1) *Fiscal federalism and interjurisdictional or horizontal tax competition*
  - (1.1) Tiebout model (1956)
  - (1.2) Debate on the model (Musgrave 1959, 1983; Boskin, 1973; Sonstelie and Portney 1978; Bewley 1981; Bucovetsky 1991; Epple & Zelenitz 1981; Schulze & Koch 1994; Perroni & Scharf 1997)
  - (1.3) Extensions of the model (Fischel 1975; White 1975; Richter & Wellisch 1996)
- (2) *Capital income tax competition*
  - (2.1) Competitive regions (Hamada 1966; Break 1967; Bewley 1981; Zodrow & Mieszkowski 1986; Wilson 1986; Wildasin 1988; Mintz & Tulkens 1990; Gordon 1992)
  - (2.2) Corrective measures and information asymmetries (Wildasin 1989; De Pater & Myers 1994; York 1993; Bucovetsky, Marchand & Pestieau 1998)
  - (2.3) Market power and asymmetric tax competition (Bucovetsky 1991; Wilson 1991; Burbidge & Myers 1994; Hwang & Choe 1995; Haufler & Wooten 1999)
  - (2.4) Trade (Wilson 1987)

- (3) *Multiple tax instruments*
  - (3.1) Optimal taxation (Diamond & Mirrless 1971; Dixit & Norman 1980; Gordon 1986; Bucovetsky & Wilson 1991; Wilson 1995)
  - (3.2) Capital and labour mobility (Bucovetsky & Wilson 1991; Wilson 1995; Huber 1999)
  - (3.3) Principle agent and common agency approach (Bond & Gresik 1996)
- (4) *Commodity tax competition*
  - (4.1) Commodity tax competition (Mintz & Tulkens 1986; de Crombrughe & Tulkens 1990; Kanbur & Keen 1993; Lockwood 1993; Haufler 1998)
  - (4.2) The equivalence theorem and optimal taxation
- (5) *Overtaxation*
  - (5.1) Double taxation conventions (Bond & Samuelson 1989; Janeba 1995)
  - (5.2) Intergovernmental (vertical) tax competition (Boadway, Marchand & Vigneault 1998; Keen 1998)
- (6) *Various forms of tax externalities*
- (7) *Efficiency-enhancing and welfare-enhancing tax competition*
  - (7.1) Competitive bidding of firms (Black & Hoyt 1989; King, McAfee & Welling 1993; Biglaiser & Mezzetti 1997; Bayindir-Upmann 1998)
  - (7.2) Imperfect competition and imperfect mobility (Burbidge & Myers 1994; Lee 1997; Janeba 1998)
  - (7.3) Commitment problems and tax incentives (Bond 1981; Hoyt & Jensen 1994; Wilson 1996; Janeba 1998 & 2000)
  - (7.4) Political economy (Niskanen 1971; Brennan & Buchanan 1980; Oates 1985, 1989; Oates & Swab 1988; McLure 1988; Persson & Tabellini 1992; Edwards & Keen 1996; Kirchgässner & Pommerehne 1996; Hindriks 1999).

Although the above-mentioned framework and chapter 2 do not include all the literature available, an attempt is made to capture the most prominent theories and expand these in chapter 3 as part of tax coordination. Although the emphasis is on tax competition in chapter 2, other forms of competition with similar properties than tax competition also exist. For instance, Cumberland (1981) argues that local decision makers who could also be regarded as national decision makers are likely to relax environmental standards in their eagerness to attract new business investment. Further, national debt could also serve as a strategic variable in tax competition models (Jensen & Toma 1991).

Chapter 4 provides an overview of the current tax situation in the EU with special emphasis on tax competition and the need for tax coordination. Issues such as efficiency and equity with the emphasis on criteria such as tax neutrality and subsidiarity within the EU, are discussed in depth. On the one hand, it is generally believed that the convergence of tax rates to one common denominator within a federation or regional grouping means that tax competition has successfully limited the “price” or tax on public goods. On the other hand, it is often believed that tax competition without any intervention could actually trickle tax rates down to not only one but the lowest common denominator, and therefore lead to beggar-thy-neighbour policies especially in developing areas. In chapters 5 and 6, the latter viewpoints are investigated for developing regions such as the SADC with the long-term goal of establishing macroeconomic stability within the region.

## **1.6 SUMMARY**

With world economies becoming more open and diverse, developing regions especially are becoming more exposed and vulnerable to unprecedented influences from each other but particularly from the industrialised world. Thus besides competing with one another, these economies have to compete with developed nations. The same argument applies to taxation. In future, developing regions will have to develop competitive tax packages in order to attract foreign trade and investment. These competitive tax packages do not necessarily mean the lowest tax rates or the most tax breaks. Instead they entail tax reform programmes that can deliver on politicians’ promised agendas with elections and overall healthy public finances.

## CHAPTER 2

### A THEORETICAL BACKGROUND TO TAX COMPETITION

#### 2.1 INTRODUCTION

This chapter serves as a background study to tax competition. It includes the arguments of various authors involved in the theoretical foundation of tax competition. These arguments mainly concern the economic efficiency of tax competition. Bagchi (1997:34) points out that “whether and to what extent welfare is enhanced as a result of the competition among states is a fit subject for research”. The actual magnitude of welfare gains or losses are therefore investigated with reference to the fundamentals of welfare economics. These fundamentals can be described as follows (Stiglitz 1988):

- (1) Under certain conditions, competitive markets lead to an allocation of resources such that no arrangement of these resources makes one entity better off without harming another; and
- (2) Each of these Pareto-efficient<sup>5</sup> allocations can be attained by means of a decentralised market mechanism and not only via a central authority.

This chapter is divided into six sections. The first section analyses fiscal federalism and the origin of interjurisdictional (horizontal) tax competition and in this regard Tiebout’s model of local expenditure (Tiebout 1956) serves as starting point. The second section extends this analysis to include mainly capital income tax competition (starting with Zodrow & Mieszkowski 1986). Commodity tax competition (starting with Mintz & Tulkens 1986) is discussed in the third section. Throughout these sections the term “region” is used to describe horizontal tax competition between lower-levels of government (eg subnational or local governments) but also between independent countries (or common markets and economic unions) with few or no border controls. The fourth section involves over-taxation through double taxation relief measures (starting with Bond & Samuelson 1989) and discusses vertical tax competition. The fifth section involves a summary of the previous sections in order to identify the various forms of tax externalities that can exist. The sixth section concludes with the efficiency- and welfare-

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<sup>5</sup> In order to clarify Pareto efficiency or optimality, a further explanation is needed: Pareto efficiency is an allocation of resources in such a way that it is impossible to increase the output or utility of any one commodity without thereby reducing the utility or output of at least one other commodity. In a non-optimal situation, it means that it is always possible to increase the output or utility of one commodity without thereby reducing that of the other. The specific allocation can therefore only improve or become better off without harming any other resource or commodity. Although seen as the best objective solution to the scarcity problem, difficulties can arise in the evaluation and comparison of different alternatives and outputs, and a skew or unsatisfactory distribution of resources can still occur.

enhancing properties of tax competition.

## **2.2 FISCAL FEDERALISM AND INTERJURISDICTIONAL (HORIZONTAL) TAX COMPETITION**

The investigation concerning efficiency in welfare economics commences with Samuelson (1954) viz. that the efficient supply of a public service requires that the cost of providing the public service be distributed so that the sum of the individual marginal prices ( $\sum MRS$ ) equals marginal cost (MC). Differently interpreted, this means that the marginal benefits (MB) derived should be equal to the marginal cost (MC). An explanation of the efficiency conditions regarding the provision of public goods in a single jurisdiction is given, and it is assumed that the benefits of public goods are available therein. These efficiency conditions are expanded to include voting procedures (Wicksell 1896; Lindahl 1919) and specifically through benefit taxation (Downs 1956). Tiebout (1956) and others use these conditions as the basis for analysing tax competition (see sec 2.3).

### **2.2.1 Tiebout (1956)**

Tiebout (1956:416-424) adopts a general equilibrium model in his analysis. In the presence of a voting procedure, the level of local expenditure can reflect individual preferences more precisely than can the level of national expenditures. This is because the market normally fails to predict the appropriate level of public goods and services. The following assumptions are applicable within the Tiebout model:

- (a) Individuals are completely mobile, ie there are no geographical constraints on individuals with respect to their residence and earnings, the latter comprising only dividend income;
- (b) Government activities generate no externalities, ie no spillovers which can lead to inefficiencies between communities;
- (c) Individuals have perfect knowledge with respect to each community's public services and taxes;
- (d) A large number of homogeneous communities exist so that individuals can find a community which best serves their needs;
- (e) The average cost of public services is constant, ie no decreasing average costs or



- increasing returns (scale economies) exist between communities; and
- (f) Public services are financed by a proportional property tax, ie benefit taxes such as user taxes and fees create no distorting incentives for movements among jurisdictions, and different tax rates are possible.

An attempt is made to explain the allocation of public services at local level through the above assumptions. The emphasis is on communities that should charge a price or tax equal to the marginal cost of public services. An equal head tax on all residents should, therefore, be charged so that individuals end up “buying” public services in much the same way that they purchase private goods, ie they pay a price equal to the marginal cost (marginal-cost-pricing-rule). Individuals choose the community that best serves their preferences for public services, ie “voting with one’s feet”. A large number of communities will thus mean an optimal realisation of this truth. This is where the difference between national and local expenditures lies. The preferences of the individual are given at national level, and government attempts to adjust to these preferences (conventional decentralisation theorem). At local level, however, various governments have their tax and expenditure patterns set and government is thus *closer to the people and more accountable* for its actions. The model mainly relies on mobility and tax competition to solve the preference identification problem that both national and local governments face in establishing local demand for public services. Tiebout however notes that: “*in cases in which the external economies or diseconomies are of sufficient importance, some form of integration is needed*”.

A vast amount of literature that extends the efficiency results of the Tiebout model in various directions also exists. Fischel (1975) and White (1975) suggest that the model may easily be extended to include mobile firms, which are modelled in the same way as mobile residents (Richter & Wellisch 1996). On the other hand, Tiebout’s assumption of a benefit tax largely rules out a tax and expenditure linked policy for redistributive purposes at local level. In this regard, Musgrave (1959) emphasises the use of specific taxes at different levels of government.

### 2.2.2 Oates (1972)

Oates’s (1972:54-63) decentralisation theorem emphasises that governments should be responsive to differences in local and decentralisation needs, in order to determine local provision where uniform delivery through national government is inappropriate. Subnational

governments therefore exist mainly because there are differences in the spatial incidence of public services. In addition, these governments need financial resources commensurate with their responsibilities. The emphasis is on subsidiarity as an objective, ie public functions should always be executed at the lowest possible level of government unless otherwise proven by a higher level. Musgrave (1959) stresses the need to centralise the redistribution function of government, although nothing prevents wealthy individuals from segregating themselves from the poor. At the same time, Oates (1972:143) questions Tiebout's model and the efficiency of tax competition, and describing the problem as follows: *"The result of tax competition may well be a tendency toward less than efficient levels of output of local services. In an attempt to keep taxes low to attract business investment, local officials may hold spending below those levels for which marginal benefits equal marginal costs, particularly for those programmes that do not offer direct benefits to local business"*.

Local officials will therefore supplement the conventional measures of marginal costs with those costs arising from the negative impact of taxation on business investment. These additional costs may include lower wages and employment levels, capital losses on homes or other assets, and reduced tax bases. Their presence will reduce public expenditure and taxes to levels where the marginal benefits equal the higher marginal costs. In similar fashion, Break (1967:24) suggests that active tax competition among state and local governments for new business tends to produce either a generally low level of state-local tax effort or a state-local tax structure with strong regressive features. The more widespread tax competition is, the more likely it is to produce negative fiscal effects without creating the stimulating economic effects sought by tax competitors.

The conclusion that tax competition is inefficient rests on the idea that when all governments behave in this way, none gains a competitive advantage. Consequently, communities are all worse off than they would have been if local officials had used the conventional measures of marginal costs in their decision-making. These arguments on fiscal federalism and tax competition spurred a debate on Tiebout's model and thus also on the efficiency gains of decentralisation.

### **2.2.3 Boskin (1973)**

Boskin (1973:204) starts the debate by arguing that individuals who are fully mobile can be the

cause of an inefficient allocation of resources. An under- or over-supply of different types of public services can thus occur because of the existence of externalities or spillovers across governmental borders. If *externalities* occur, two policies can be used to yield a socially optimum level of public services: A higher level of government can directly provide the appropriate levels of each type of public service in all competing jurisdictions or a Pigouvian tax-subsidy scheme<sup>6</sup> can be imposed to obtain the desired welfare function. An *open-ended matching grant* with appropriate matching formulae (revenue-sharing formulae) can thus serve as an appropriate tax-subsidy scheme, ie a negative matching rate for public services over-supplied and a positive matching rate for public services under-supplied<sup>7</sup>. Sonstelie and Portney (1978:264) go further and argue that the role of communities as suppliers of public services should be recognised. Individuals are normally utility-maximising and firms profit-maximising in order to achieve an efficient resource allocation. The solution offered to the existence of externalities or spillovers is that communities should act as if they are *profit-maximising firms* to reach the goal of allocative efficiency.

#### 2.2.4 Bewley (1981)

Bewley (1981:713) continues the debate and implements an Arrow-Debreu<sup>8</sup> general equilibrium model. This model has distinct areas of residency and emphasis is placed on the relationship between the cost of public services and the size of a region's population.

It is argued that Tiebout's homogeneous communities and profit-maximising governments are virtual and far from real. Two cases are explained to verify this argument, viz. a pure public-goods case in which the cost is independent of the population, and a pure public-services case in which the cost is proportional to the population. The role of regions in the production process is recognised through two types of regions: Firstly, closed regions where all production takes place inside regions and no trade takes place and secondly, free-trade regions where production is completely independent of the regional distribution of the population. Bucovetsky (1981:171) provides proof that mobility would not lead to a Pareto-efficient outcome. The familiar  $\sum MRS = \sum MRT$  condition is used to explain this. An efficient outcome can only be achieved

6 A Pigouvian tax-subsidy serves as a charge against or encourages the production of goods and services, which causes either external costs or benefits.

7 A detailed discussion will be provided in chapter 3.

8 This concerns the establishment of equilibrium for an integrated model of production, exchange and consumption. A competitive equilibrium exists if every individual has initially some positive quantity of every commodity available for sale, and some individuals are capable of supplying a positive amount of at least one type of labour with positive usefulness in the production of desired commodities.

when rational individuals choose the level of public output in each jurisdiction, in the presence of no returns to scale, no distortions from property tax, and no mobility.

Epple and Zelenitz (1981:1197) adopts a Cournot-Nash<sup>9</sup> model in governmental decision-making, and argue that competition among numerous jurisdictions is not sufficient enough to guarantee public-sector efficiency in the same way as does private goods competition. In contrast to residents, land is immobile, ie governments are allowed to implement some land rents to meet their own needs. The focus falls on the equilibrium among jurisdictions, ie the effect of a changing degree of competition among jurisdictions on tax and expenditure policies of individual governments. In conclusion it is indicated that competition among various jurisdictions is not sufficient to prevent local governments from exercising monopoly power.

In summary, Tiebout (1956) maintains that competition for mobile households and therefore fiscal decentralisation are welfare enhancing and efficient. The model is, however, based on restrictive assumptions, and centralisation of some public functions may be required. Market failures or imperfections, such as fiscal externalities and economies of scale in the production of public goods occur in the real world. Perfect mobility does not exist and there are normally not enough communities to cater for each individual's needs. Preference revelation becomes a problem and local governments can exercise monopoly power. Musgrave (1959) emphasises the need to centralise the redistribution function of government, although nothing prevents wealthy individuals from segregating themselves from the poor. It is therefore important that taxes do not distort private decision-making, ie neutrality is emphasised. Although the principle of subsidiarity is supported by the theory of fiscal federalism, Oates (1972) queries the Tiebout model and opines that tax competition (as part of fiscal decentralisation) can be inefficient.

### **2.3 CAPITAL INCOME TAX COMPETITION**

Hamada (1966:362) is one of the first to find that a non-cooperative equilibrium or Nash equilibrium (ie where countries act independently in tax or subsidy decisions) is inefficient and that Pareto-improvements are possible through cooperation under certain conditions. Much later,

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<sup>9</sup> Cournot's duopoly model (1833) describes a market model of, for instance, two springs and two firms, each of which independently seek to maximise its profit. As firm A has no direct influence on the sales of water from proprietor B's spring, A alone can adjust his price, while B is forced to accept A's price. This is how the reaction curve for A and B is obtained and B will therefore react to any change in the price of A's product, which will again influence the output or quantity of both proprietors. The duopoly model can also be used to describe Nash equilibrium. Nash equilibrium is a situation where each firm (country) is doing the best it can, given the behaviour of its rivals (section 2.4).

in continuance of this and Oates's (1972) observations, other academics such as Beck (1983) investigate tax competition, but in terms of residential capital (metropolitan models). In section 2.3, however, the emphasis is on industrial capital (starting with Zodrow & Mieszkowski 1986 and Wilson 1986) that makes such capital more applicable to tax competition between countries (regions) also. Most of these models are neo-classical, and it is only towards the end of the Chapter that an argument for imperfect competition, specifically under the new trade theory, is put forward.

Most literature discussed in this and the following sections involves game-theoretic<sup>10</sup> analysis. In this Chapter the analyses is made applicable to tax competition within a specific country (region) or economic union but also between independent countries (regions), although some of these models' original intention was only on an interjurisdictional level within one country (region). A non-cooperative or Nash game between capital exporting (lending) and capital importing (borrowing) regions thus evolves.

Nash bargaining is a two-person economic game in which there is no cooperation between the players. Nash equilibrium can be interpreted as a pair of expectations about each person's choice such that, when the other person's choice is revealed, neither individual wants to change his behaviour. The earliest exponents of this art include Cournot, Bertrand, Edgeworth and Zeuthen, who investigate the responses of firms (reaction curves), given the behaviour of other firms. Nash equilibrium therefore corresponds with Cournot equilibrium in the sense that each firm maximises profits, given the other firm's behaviour. In this chapter Nash bargaining is applied to show how regions make the best responses to the taxation decisions of their rivals. The question that normally develops is the following: Is fiscal cooperation, rather than fiscal competition, Pareto-improving?

Gamelike situations are generally classified as the following: negative-sum, zero-sum, or positive-sum games. A negative-sum game is one in which all players lose or are worse off after the game than before the game. A zero-sum game is one in which one player's losses (if any) are exactly offset by other players' gains. Positive-sum games are those in which all players are better off after the game than before the game. This game can affect the location of investment

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<sup>10</sup> Game theory is a way of describing the various possible outcomes in any situation involving two or more interacting economic agents. Different types of games exist and in this and the next section the focus falls on the so-called Cournot-Nash equilibrium (already discussed) and the prisoner's dilemma. Only two players (two governments or regions) are involved and the game is once-off in nature (Varian 1999).

(consumption) or investment behaviour, via the use of taxation such as tax rates, tax incentives, double taxation relief and other tax coordination measures.

### 2.3.1 Zodrow and Mieszkowski (1986)

Zodrow and Mieszkowski (1986:358) investigate Pigou's proposition that the utilisation of distorting taxes (in this case a source-based tax) rather than neutral-head or lump-sum taxes, reduces public service levels. A simple model with competing local governments (also applicable to intermediate governments or countries) is applied to demonstrate that the use of a distorting tax on mobile capital decreases the level of public services. This model serves as the basis for all capital income tax competition models in this section and as such, modifications and extensions are incorporated. The following assumptions are applied as part of the provision of public services:

- (a) A national economy is composed of  $N$  identical jurisdictions (small regions), with each jurisdiction having an identical supply of land (or labour) that is fixed, ie inelastic. There is also no absentee ownership of land;
- (b) Capital stock ( $K$ ) is fixed and perfectly mobile across jurisdictions so that all capital earns the same net return ( $r$ ). Land (labour) and capital are the only factors of production in the economy;
- (c) Perfectly competitive firms produce a single output in each jurisdiction and constant returns to scale are assumed;
- (d) Each community has the same number of identical residents and each resident owns an equal share of the land in the jurisdiction where they reside, and an equal share of the capital stock that is not necessarily invested in the jurisdiction of residence;
- (e) There is no other source of individual income, besides that on land (labour) and capital. The population in each community is equal to one and all quantities are thus defined on a per capita basis; and
- (f) Public services ( $G$ ) in the representative jurisdiction ( $i$ ) are modelled as public purchases of output, which are financed either by a specific unit tax on capital ( $t$ ) or by a head tax assessed against all residents ( $R$ ).

The permitted amount of lump-sum taxation is fixed exogenously at the same level for all communities. Public services are treated as publicly provided private goods with no spillover effects and are shared equally by all residents. The government in each jurisdiction acts on the

fact that all other jurisdictions do not respond to changes in its tax rate, and that its actions cannot affect the net return to capital ( $r$ ), ie non-cooperatively.

Each government acts to maximise the utility of a representative individual. The representative utility function,  $U(C, G)$ , which is identical for all individuals in the economy is represented by a quasi-concave function, with consumption of private goods ( $C$ ) and public services ( $G$ ) applicable. Private and public goods are both normal goods, and the level of private goods is determined from the private budget constraint, viz.  $C = [F(K) - (r + t)K] + r(K/N) - R$ . The first term in this formula reflects the return to land (labour), the second the return to capital, and the third the head taxes on capital (property tax in this case) paid.

Interjurisdictional competition is modeled along Cournot-Nash lines and the problem facing a region's government is to choose a unit tax rate on capital,  $t$ , to maximise the representative utility function. The optimisation problem,  $\max U\{[F(K) - (r+t)K] + rK/N - R, tK + R\}$ , facing each government is derived from the assumptions outlined above. This is subject to the budget constraint requiring that tax revenue equal public services, ie  $G = tK(r+t)$ , where  $r$  is the net return (after tax) to capital; and  $K(r + t)$  is a function relating the demand for capital in the region to the cost of capital ( $r + t$ ). As more capital is invested in the region, its marginal product falls and the marginal product of (land) labour rises. Firms invest up to the point where the marginal product of capital equals  $r + t$ . Further, for every unit rise in  $G$ , government must increase  $t$ . As a result, the cost of capital rises, causing the demand for capital to change by some negative amount. Since  $r$  is fixed from the region's viewpoint, the higher tax rate does not reduce the resident's capital incomes. Residents indirectly pay the tax through a decline in their wages.

Each region, acting in isolation, is concerned that higher taxes on capital or property will drive out capital and decrease its income (rent or wages) from land or labour. A rise in the region's tax rate would thus benefit other regions (positive externality) through a capital outflow. The government fails to account for such external benefits for other regions because it is only concerned with the welfare of its own residents. The tax rates and public service levels are therefore set at inefficiently low levels. One solution for obtaining an efficient or optimal tax is to set the level at zero whilst public services, financed from this tax, will be provided up to the point where the marginal rate of substitution (MRS) equals the marginal rate of transformation (MRT), ie Nash equilibrium or allocative efficiency.

In summary, Zodrow and Mieszkowski (1986) argue that inefficiently low tax rates and levels of public service provision are the result of competition for scarce capital. The main assumption is that each local government's public expenditure must be financed by a tax levied on capital income earned within its boundaries, ie a source-based capital income tax. One reason for this assumption is that governments may find it administratively convenient to tax both capital and land at the same rate (uniform taxation). This case is based on local property taxation in the United States (US). This type of tax, however, distorts location decisions of investment (see also section 2.3.2.1). Governments would therefore prefer a lump sum to a distortionary tax. This type of tax, however, is not always practical in terms of equity.

Wildasin (1988:229) also investigates a large number case, but takes the analysis further with public service (expenditure) levels serving as strategic variables, whilst tax rates adjust to satisfy governments' budget constraints. Governments levy capital or property taxes in order to maximise public service provision and the utility of a representative individual. Nash equilibrium in tax rates or in expenditure levels is applicable, but tax competition and expenditure competition are not synonymous. In a system of identical regions, the change in a strategy variable pushes equilibrium public service levels further below the efficient level. On the one hand, most tax competition literature assumes identical regions and therefore identical tax rates. The main reason is to isolate inefficiencies in the overall level of public service provision, from the efficiency and equity issues concerning differences in tax rates and public service levels across regions. The cost of capital outflow from one region is therefore exactly offset by the benefits from the accompanying capital inflows to other regions (a zero-sum game), ie Samuelson's public service rule, marginal benefits (MB) equal marginal costs (MC), stands. All regions' tax rates and public service levels can be increased by identical amounts and these changes will raise the welfare in all regions. On the other hand, factor mobility and thus distortions and externalities can be excluded when these models are applied within closed economies. In an open economy, however, no region's government has an incentive to raise  $G$  to the point where  $MB=MC$ , given the costs associated with the resulting capital outflow. In this case, coordination among regions, suggesting more centralisation, would be required.

### **2.3.1.1 Corrective measures and information asymmetries**

Capital income tax competition models can be modified to include a variable supply of resident-owned capital for the system as a whole, due to savings behaviour of residents (Wilson 1999). If



a subset of regions increases its tax rates, total savings may decline, dampening the amount of capital that is re-directed to other regions. The fiscal (interregional) externalities and the tax competition problem remain, but the importance thereof is reduced. Further, absentee ownership of the immobile factor, land, introduces *tax exporting* into the analysis. The capital tax is capitalised into the return of land, passing part of its burden on to nonresidents. This form of tax exporting *counteracts (but does not eradicate)* the effects of tax competition, thereby raising the supply of public services. The converse of this argument can also hold ie that tax competition (under-supply of public services) can be used to counteract the over-expansion of the public sector (section 2.6).

Alternative corrective measures that can be implemented by governments at national level include, for instance, the provision of subsidies to each region in relation to the revenue raised (Wildasin 1989; De Pater & Myers 1994). Setting aside Wildasin's perfect competitive jurisdictions aside, De Pater and Myers (1994:77) suggest that in asymmetric imperfect competitive jurisdictions there is a second source of inefficiency: This second source is found when a jurisdiction increases its capital taxation. Capital is misallocated across regions, so that the marginal product of capital (MPC) is relatively high in high-tax regions, thus needing correction. Burbidge and Myers (1994:456) prove inter alia that, in the presence of imperfect population mobility, a decentralised jurisdiction may be able to offset the externalities generated by capital tax competition, with the result that Nash equilibrium could be efficient. This, however, is only possible where one jurisdiction makes a positive transfer of resources to the other to control immigration.

Lump-sum transfers of income between regions can be implemented as corrective measures. This takes information problems of the national authority into account (Bucovetsky, Marchand & Pestieau 1998). In this case, an optimal grant function induces the high-demand (capital exporting) regions to choose a higher tax rate than low-demand regions. The capital market is distorted at the optimum as a means of inducing the different types of regions to select different grant levels. The outcome is that high-demand regions under-provide the public service (ie  $MB > MC$ ) but the low-demand regions are induced to over-provide the public service (ie  $MB < MC$ ). As mentioned in section 2.2.3, a Pigovian tax-subsidy scheme through an open-ended matching grant with appropriate matching formulae (revenue-sharing formula) may be one of the solutions.

Information asymmetries, however, can cause the national authority to “overcorrect” the tax competition problem by inducing some regions to shift from under-supplying public services to oversupplying them. Wilson (1999) argues that further research is needed in terms of information problems, nationally and internationally. The lack of understanding as to how these asymmetries develop and the exact form they take, are emphasised. Game theoretic models can therefore be enriched through relaxing the assumption of perfect information and exploring the possible consequences of information asymmetries, allowing a party to cheat by misrepresenting its preferences (section 2.7). In this regard, game theory entails a more realistic representation than traditional fiscal-federal literature because it focuses on processes as well as fiscal outcomes (Ajam 1998:102).

### **2.3.1.2 Market power and asymmetric tax competition**

In a large number and purely competitive case, public services are under-provided in Nash equilibrium (ie a non-cooperative outcome) as seen from previous discussions. Some regions may, however, possess enough market power or be large enough to influence the after-tax return to capital ( $r$ ). The literature typically treats tax rates as strategy variables and public service levels adjust to satisfy each region’s government budget constraint once all tax rates have been chosen. In this case, a large number of large regions, in contrast to small regions, are present and the cost of capital ( $r + t$ ) therefore becomes less sensitive to changes in the tax rate. An increase in one region’s tax rate continues to create a positive externality through a capital outflow, but the outflow is less severe due to the partial capitalisation of higher tax rates into after-tax return on capital ( $r$ ).

Bucovetsky (1991) and Wilson (1991) take the analysis a step further by investigating asymmetric tax competition, ie when regions are non-identical and differ in size, as distinguished by the number of residents, each possessing the same endowments of capital and labour. It is suggested that larger regions will compete less vigorously for capital through tax-rate reductions because of the insensitivity of the cost of capital in these regions, and therefore end up with a higher tax rate. A small region is therefore in a privileged position because firms will employ more capital per unit of labour, consequently offering higher wages than in the larger regions. If the difference in size is sufficiently large, the small region it will be better off than it would be without tax competition (assuming capital income tax is replaced by a head tax on residents). This result changes when “tariff wars” are considered.

Kennan and Riezman (1988) present a formal analysis of a tariff war between two countries, modeled as Nash equilibrium in tariff rates. The larger country “wins” if the size difference is sufficiently great. Results differ because interjurisdictional or interregional externalities occur. With tax competition, the smaller region has the lower tax rate and is the beneficiary of the positive externality created by the flow of capital from the larger region. With tariff wars, however, a country’s tariff creates a negative externality by changing the terms of trade unfavourably as observed by the other country.

Wilson (1987) extends the present analysis into the field of interregional trade, ie the effect of tax competition on private goods. In this case, some regions choose to compete vigorously for capital, ending up with capital-intensive firms and high wages, but low public-service levels. Other regions forego this competition and settle for labour-intensive firms and low wages, but high public-service levels. Any single region is indifferent to the two tax policies, since all regions are identical. All individuals are also identical and it is therefore inefficient for residents of different regions to consume different bundles of private and public goods.

### **2.3.2 Bucovetsky and Wilson (1991)**

In a choice of tax instruments, governments have to decide whether efficiency or equity is their most important goal. Tax competition would not exist if governments could utilise a head tax or other forms of lump-sum taxation. The latter types of taxation do not distort private sector behaviour because they are collected in fixed amounts, independent of consumption and production. They are therefore regarded as efficient and neutral without any excess burden. In Zodrow and Mieszkowski’s model this tax is a tax on land or labour that is assumed to be fixed and immobile. Within a perfect framework where this benefit or lump sum tax is utilised, fiscal residuals for all individual taxpayers will be zero. The tax is, however, regressive and the distributional consequences, viz. that after-tax distribution is more unequal than the before-tax distribution, should always be taken into account. This means that within a region there will always be people with positive fiscal residuals (often the poor) and people with negative fiscal residuals (often the rich).

The rich carry a disproportionate share of the tax bill in relation to public services delivered. This could motivate the rich to move, causing the tax base and the provision of public services to erode. The lump-sum tax is normally regarded as politically unfeasible and impractical. Trade-

offs could occur between the objectives of taxation (efficiency and equity) depending on government priorities<sup>11</sup>. Alternatively, it may become necessary to supplement capital income tax with other forms of taxation that are distortionary in terms of consumer or producer decisions. The validity of tax neutrality and optimal taxation then becomes questionable.

### 2.3.2.1 Optimal taxation

In an international setting, government operates in a market system alongside the private sector in financing and providing its services, and may by its very actions distort the decisions of the private sector. The conventional belief that taxing income entails a higher welfare (efficiency) cost than taxing consumption, is primarily based on the observation that income tax consists of two broad components: labour tax and capital tax. Since labour tax is equal to a tax on consumption in an intertemporal framework, income tax gives rise to an additional distortion – on savings – that is absent from the commodity tax. In the traditional neoclassical growth model, the length of the consumer's planning horizon plays a crucial role in the theoretical ambiguity of the relative superiority of commodity tax. If the savings decision is based on life-cycle considerations, the optimal mix of income and commodity taxes would depend entirely on the relevant elasticities, ie labour supply and savings. In contrast to this model, the new endogenous growth literature adds a crucial component to the analysis – human capital – that in itself complicates the analysis and results tend to be more ambiguous (Tanzi & Zee 2000:10).

It follows that the design of an optimal tax structure must be carried out within the analytical framework of a second-best world (Frenkel, Razin & Sadka 1991:99). The theory of the second best is applicable where multiple tax instruments are available. It means that in the presence of existing distortions, policies that in isolation would increase efficiency can decrease it and vice versa. The benchmark result of optimal taxation starts with the aggregate production efficiency theorem (Diamond & Mirrless 1971). According to this theorem, an optimal tax structure is one that does not, assuming there are no constraints on the choices of taxes available to a government, distort production decisions. It minimises output that is then divided up between consumption and government spending. The existence of tax differentials will, therefore, usually have a distorting effect on savings and investments between regions.

The implication of the aggregate production efficiency theorem is that the source principle is

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<sup>11</sup> The perceived unfairness of the poll tax introduced in 1990 by the Thatcher government in Britain is widely recognised.

always inferior to the residence principle, which is the only one guaranteeing the absence of distortions in individuals' investment and production choices. Tax principles (tax assignment rules) are the entitlement of jurisdictions to apply the national tax rate to capital income and commodities. They determine both the distribution of tax revenues between regions and the tax rate that is levied on international investment and trade. In the absence of lump-sum taxes, tax policy is therefore optimally chosen in an open economy when the country operates on its consumption possibility frontier and does not distort production (Dixit & Norman 1980; Frenkel, Razin & Sadka 1991). This result rests on some strict assumptions: Firstly, there are no constraints on the choices of taxes available to a government. Secondly, foreign countries do not react to tax reforms. This can only be true when the country of tax reform is small and has a negligible effect on prices in all markets.

Theorists in tax competition extend the aggregate production efficiency theorem to an open economy context to include the desirability of source-based versus residence-based capital income taxes. According to the source or territorial principle, income originating in the home region is uniformly taxed, regardless of the residency of the income recipient. Capital income is taxed only in the regions where it is produced, ie on the gross domestic product (GDP) and hence foreign-source income is tax exempt. The residence principle tax residents of a region uniformly on their worldwide income, regardless of the source of that income. The region of residency taxes all capital income of the investor (GNP of the region), and capital income generated abroad (foreign-source income of residents) is exempted from taxes, or a tax credit/deduction (hybrid residence principle) is provided.

The first amongst these models are that of Bucovetsky and Wilson (1991). In contrast to Zodrow and Mieszkowski (1986), a model is presented where a labour (wage) tax is also available and the number of regions is either small or large. A two-period setup, first used by Gordon (1986), is applied to examine a single region's tax policy. In the first period, residents have to decide how much labour to provide to competitive firms and in the second period, how much to save for consumption. The residence-based tax on capital is basically a tax on residents' income from savings, which is a tax on future consumption. By also taxing labour income, the government implements an optimal commodity tax system, leaving no room for a beneficial source-based tax.

Bucovetsky and Wilson (1991:334) consider the following tax instruments viz: a source-based capital tax rate; a residence-based capital tax rate and a wage tax rate. The source-based tax

inserts a wedge between the cost of capital to domestic firms and the world return on capital, whereas the residence-based tax places a wedge between the world return and the after-tax return residents earn on their income from savings. Cases are investigated where regions cannot use a residence-based tax on capital income and wage income is not taxed. Regional governments play a Nash bargaining game in tax rates, with each choosing the tax rates that maximise the representative individual's utility. A government budget constraint is applicable and relates public service provision to tax rates.

It is argued that governments' application of the available tax instruments is efficient when both source- and residence-based capital taxes are available, even in the absence of wage or labour taxation. Tax competition, however, disappears when the residence principle is applied. The presence of both tax instruments effectively allows regional governments to manipulate gross and net returns to capital independently from world return. With both taxes, the region is effectively able to insulate itself from the capital flows that occur in response to another region's tax and expenditure policy. Interregional externalities are thus excluded. In the case where no residence-based tax is applied, a rise in a region's tax and expenditure levels creates a positive externality by causing a capital outflow that drives down the world return. The absence of the residence-based tax, rather than taxes on wage income, is therefore responsible for the tendency of decentralised decision-making by local governments to produce inefficiently low levels of taxation and public spending.

Authors such as Giovannini (1989), Sorenson (1992), Apel and Dillen (1994) confirm the superiority argument of Bucovetsky and Wilson concerning the residence principle. Two-period models with two or more countries that set capital income taxes independent from each other are applied. It is noted that as the responsiveness of savings to real interest rates is relatively small, compared to the mobility of international capital, the residence principle is most likely to generate the least welfare losses (see also Han 1992). In contrast, Razin and Sadka (1990) and Frenkel, Razin, and Sadka (1991) suggest that tax competition can be efficient even in the absence of residence-based taxation. A source-based tax is forthcoming, especially where a government cannot effectively tax resident's income. In this case only two small competing countries that face a fixed world interest rate determined in a large third country, representing the rest of the world, are considered. The rest of the world is, however, not applicable in Bucovetsky and Wilson (1991). Because of all these problems, research has been extended to include analysis in models where residence-based taxation is either limited or not available, as well as in

the field of imperfect competition (section 2.7).

The importance of the argument that tax competition can be efficient even in the absence of residence-based taxation, relates in effect to the fact that the application of the residence principle gives rise to all kinds of problems (for instance, administration and compliance costs in terms particularly of foreign-source income). In an open economy, governments often cannot fully tax foreign source income due to capital flight (tax evasion) or the manipulation of transfer prices within multinational corporations (sec 2.7).

Governments are not always inclined to report to foreign fiscal authorities on, for instance, income from those residents investing abroad (Baccheta & Espinosa 1992 & 1995; Schulze & Koch 1994:207). Instead, the host fiscus has a strong incentive to tax nonresidents for the reason mentioned above (a source-based approach). Empirical evidence has been provided in terms of tax enforcement problems (tax evasion) and thus the survival of capital income taxes (Gordon 1992).

Frenkel, Razin and Sadka (1991:214-216) argue that no capital income tax whatsoever should be levied if capital flight cannot be effectively stopped. Welfare, however, may increase by imposing capital controls that could, at least to some extent, reduce tax-motivated capital flight (Gordon 1986; Razin & Sadka 1991; Huber 1997). Even if an investment-neutral tax is available, a government may use distortionary taxes to influence the investment or production choices of firms. This, however, is applicable in terms of imperfect competition when firms have market power in the output market, or governments manipulate terms of trade in the capital market (Janeba 1994).

Huber (1999) argues that the absence of a residence-based or optimal commodity tax creates a role for a source-based capital tax. It should now be used to distort investment decisions in such a way that it reduces the spread between skilled (owners of more capital) and unskilled before-tax wage rates. Distributional consequences are therefore brought into the picture. Capital tax continues to create a positive interregional externality, but now this externality consists of beneficial equity effects. This argument also links up with the next analysis concerning capital and labour mobility.

### 2.3.2.2 Capital and labour mobility

Bucovetsky and Wilson (1991) show that the absence of residence-based tax does not justify capital income being taxed at source. Instead, small regions choose not to tax capital income, given that this can only be taxed on a source basis. In this context, it is argued that a small region should meet all of its revenue needs by taxing only labour income, although the decision to work or relax are distorted. The supply of capital investment is again regarded as perfectly elastic for a small open economy and labour supply is perfectly inelastic (fixed). Instead, if regions have the market power necessary to influence the after-tax return of capital, a region's optimal tax system should again include a source-based tax on capital income.

Tax competition is often discussed in the context of distorted labour markets and unemployment (Huang 1993). Janeba (1994) argues that lower taxes on capital or businesses, where income or net surplus is correlated with employment, may not be a good substitute in the presence of severe unemployment problems. This problem has, however, been ignored in tax competition literature. One of the major reasons for this is that it is difficult to incorporate a theory of unemployment into a tax competition model because of inconsistencies in unemployment theory itself (Brander & Spencer 1987). One way of addressing this problem is to assume that employment is positively correlated with output and that Leviathan and benevolent governments maximise tax revenues that are defined as corporate tax revenues minus compensation benefits to unemployed workers (Janeba 1994). In this chapter, however, full employment models are usually utilised to describe tax competition.

Wilson (1995) investigates public-service provision in an economy with interjurisdictional *capital and labour mobility*, with multiple tax instruments. In this case, local government treats the wage (labour) tax as though it is distortionless, because any adverse effect of this tax on labour-leisure decisions is offset by an inflow of migrants. Individuals moving elsewhere bring both benefits and costs with them. An increase of the tax base may be a consequence, but an increased demand for public services and increased congestion (of roads and parks, for instance) may also occur. Since in many cases these migrant individuals neither pay for these costs nor are compensated for benefits delivered, inefficiencies such as the excessive concentration of the population in major cities, may arise. Fisher and Peters (1996:6) finds that tax and incentive competition leads to a non-beneficial redistribution of jobs, in the sense that no evidence can be found that jobs are shifted from low unemployment to high unemployment jurisdictions.



Gabszewicz and Ypersele (1996) argue that increasing capital mobility tends to lower the minimum wage (see also Lejour & Verbon 1996). Hwang and Choe (1995:669) and Haufler and Wooten (1999) investigate tax competition between two heterogeneous regions (poor and rich in per capita terms) with mobile capital and immobile labour. The effects of the differences in factor endowments on the equilibrium tax rates, relative utility levels, and the efficiency of the public service provision are analysed. A unilateral change in the tax rate on mobile capital has two primary effects on utility: through its effects on capital allocation and the rate of return to capital.

The capital allocation effect gives the region with a larger population a greater incentive to raise the tax rate, because the effect of one unit of capital outflow is smaller in per capita terms for this region. A change in capital return has a greater effect on the capital income for the region with a larger share of capital endowments. The capital return effect gives the poor region an incentive to raise its tax rate, and the rich region an incentive to lower its tax rate. When regions have different capital endowments, the poorly endowed region will be worse off, *ceteris paribus*. Therefore, if the poor region chooses a higher tax rate, its utility will be lower than its rival's utility. However, if the poor region chooses a lower tax rate, the tax and wealth effects offset each other. When the advantage of the lower tax rate dominates the disadvantage of the smaller endowments of capital, a higher utility results and vice versa. When the two effects offset each other, the two regions will have the same level of utility.

In summary, it appears that the competition for capital can lead to inefficiently low levels of taxation and thus the underprovision of public services (with some exceptions, eg size differences). This result can be observed even where multiple tax instruments (other instruments besides a source-based capital income tax) are available to a government. This inefficiency extends to the so-called *principal-agent* and *common-agency approaches*. Besides the information asymmetries that exist between governments, the latter also face information problems concerning firms as taxpayers. In this case it is important for a government to base its taxation on observable patterns in firms' behaviour (eg investment behaviour). Governments serve as principals and firms as agents.

When two or more governments compete for a share of a mobile firm's profits, it becomes a common-agency problem with governments serving as multiple principals. The firm has the advantage of private information and earns "information rent" which becomes higher

concomitantly with the level of tax competition between the two principals. Again, tax competition worsens the aggregate welfare of the principals. This analysis can also be used where two principals (home and host governments) attempt to tax foreign-source income from subsidiaries of multinationals with mostly the same results as in the case of the principal-agent approach (see Bond & Gresik 1996).

## 2.4 COMMODITY TAX COMPETITION

Commodity taxation is also investigated within a tax competition context by various authors. The following section deals with this. This type of analysis is especially applicable within a process of economic integration, eg in a common market or economic union, and a federation. Different commodity tax rates across borders create distortions that in turn induce spillovers or externalities such as cross-border shopping. The most familiar types of commodity taxes are the single-stage retail or general sales tax (RST/GST) and the multi-stage or broad-based value-added tax (VAT). The main difference between the two entails different methods of collection, with RST on a suspensive system and VAT on a repayment system; and the tax base that is being taxed also differs.

With VAT the onus is always on traders to convince the tax authorities that their claims for refunds on their inputs are justified, whereas under RST there are no such claims (the tax is levied only once at the final destination or on imports). The claims for refunds or the tax liability can be computed via subtraction, addition or tax credits (invoice method). Detailed records of purchases as well as sales have to be kept under a VAT mechanism but not under RST. Administrative difficulties may therefore occur more readily with VAT, but it is also normally implemented to curb tax evasion and corruption. VAT is also introduced for minimising “tax-on-tax” for which RST/GST is criticised.

### 2.4.1 Mintz and Tulkens (1986)

Mintz and Tulkens (1986:135) were the first to investigate commodity tax competition between independent fiscal authorities. A two-region economy (high-tax and low-tax) where an origin-based commodity tax<sup>12</sup> is levied by each region, is investigated. The tax is levied on a private

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<sup>12</sup> This tax is levied at producer's level that is, a uniform tax is collected only on the output of domestic firms regardless of where this output is ultimately consumed. Exports are taxable whilst imports are zero-rated (production tax). Zero-rating implies that the firm files a return but

good to finance a local public service. The Nash equilibrium of these tax rates is analysed whilst all other private goods are untaxed. A single region's market and fiscal decisions as functions of the region's characteristics as well as of its environment, is investigated.

The analysis is extended in order to consider simultaneous decisions made by the two regions. A so-called *regional market equilibrium (RME)* and *interregional market equilibrium (NCFE)* are included in the model. In these two cases, the equilibrium is fully efficient, not inefficient as previously discussed. The main reason for this is that transport costs are so high that no cross-border shopping occurs, either in equilibrium or in response to small tax changes. In these cases, none of the interregional externalities described previously appear. Wilson (1999) argues that it is difficult to describe these cases as "tax competition", because governments are not really competing over the tax base. Not all theorists on tax competition, however, share this view.

There is a two-person game and the players are local governments. The strategies are local taxes and expenditure levels, and the payoffs are the regional welfare function. Nash equilibrium is established in this two-person game in which there is collusion, ie a non-cooperative or competitive situation. This is referred to as a non-cooperative fiscal equilibrium (NCFE). A NCFE amongst two regions that choose optimal tax rates and public services production may not always exist due to a significant change in the fiscal or tax reaction functions. This means that a switch from one type of regime to another could occur. Differences in the regions' government size, as well as tax levels can therefore arise from strategic behaviour and not only from differences in tastes and endowments. In the absence of interregional public service spillovers, the inefficiency of a NCFE thus arises from two types of externalities, viz.:

- (a) Negative private consumption effects (terms-of-trade effects) that occur when an increase in a region's tax affects the private good purchases of the other jurisdiction's residents; and
- (b) Positive public consumption effects that occurs when an increase in one region's tax, increases the tax base of the other region. This is similar to the positive externality discussed in the previous section (see also Bucovetsky 1995:362).

Again, emphasis is placed on the fact that tax competition is inefficient under the origin (source) principle in both regions and that cooperative policy measures may become essential in

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pays zero tax on sales and gets a refund in respect of VAT payments made at earlier stages in the production and distribution chain. By contrast, exemption implies the firm need not file a VAT return and does not levy VAT but also cannot claim refunds for any VAT included.

improving the outcome of the NCFE, in short Nash equilibrium.

#### 2.4.2 Kanbur and Keen (1993)

In Kanbur and Keen's spatial model of cross-border shopping (1993:877), it is argued that unrestricted tax competition (open borders) can take place between small and large regions (countries). The following assumptions are utilised:

- (a) There is a partial-equilibrium model of two countries (home and host) and a single taxed good;
- (b) The population is distributed uniformly in each country, but the two populations may differ in size;
- (c) Commodity taxes are levied on a destination basis<sup>13</sup>, and there are no barriers to the entry or exit points of new stores; and
- (d) The individual has two decisions to make when buying a commodity, viz. to buy in the home country or to travel to the host country with transportation costs involved.

A pay-off matrix can be utilised to show the results of the different game situations. In this case, the matrix (table 2.1) describes unrestricted tax competition as a "prisoners' dilemma". Prisoners' dilemma is a famous case in game theory literature. Although the analysis is given in terms of commodities (cross-border shopping), the same analysis can be applied to mobile capital (Hallerberg 1996).

**Table 2.1: Prisoner's dilemma facing two regions on tax policy**

REGION A \ REGION B	CONFESS (COMPETE IN TAXES)	DENY (NO TAX COMPETITION)
COMPETE IN TAXES	3,3 <sup>1</sup>	6,0
NO TAX COMPETITION	0,6	2,2

Note: 1. These values (x, y) represent pay-offs in terms of ordinal utility between A and B (the higher the values, the better the pay-offs).

<sup>13</sup> The commodity tax is levied at the consumer's level and enables the region to collect a tax on all of its residents' private good consumption. If the destination principle is adopted in both the home and host regions, imports are taxed at the same rate as domestically produced goods and exports are zero-rated. As in the case of the residence principle, the destination principle is perceived to be a more fair and equitable practice because domestic and imported goods are treated the same (exports are zero-rated but imports are taxable). Administrative problems may be more likely with this system because of information difficulties in the taxation of imported goods.

In table 2.1 it is shown that Nash-equilibrium (3,3) is reached where both regions A and B both compete in taxes. When small and large regions compete in taxes, both behave in a Nash manner. This means that each region chooses its own tax rate to maximise its tax revenue while assuming a fixed tax rate by the other region, bearing in mind the impact on cross-border shopping. In this equilibrium situation the small region (size relating to the number of residents) undercuts the large region because the small region's tax rate ( $t$ ) is below the large region's tax rate ( $T$ ), ie  $t < T$ . This point, however, is Pareto-inefficient. When neither region competes in taxes, ie tax competition is restricted (by closed borders), joint tax revenues are reduced or minimal, with larger regions suffering a revenue loss (if the difference in size is sufficiently great) and the small regions normally gaining revenue.

Cnossen (1990:476) argues that the potential revenue loss with cross-border shopping may be particularly injurious to smaller regions because these regions are normally rate-takers and not rate-setters as is the case in larger regions. Smaller regions normally tend to set rates lower to increase the volume of their sales. It is therefore undesirable to set a uniform tax rate somewhere between  $t$  and  $T$  because this will always harm small regions, relative to the Nash-equilibrium. It will, however, be beneficial to the large country (relative to the Nash equilibrium or unrestricted tax competition) if harmonisation takes place at rate  $T$  (rate-setter); but harmful if harmonisation takes place at rate  $t$  (rate-taker). Setting a minimum tax rate somewhere between  $t$  and  $T$ , will lead to the small region setting the minimum rate, still undercutting the large region. In this case both regions will set their tax rates higher at point (2,2) and, therefore, revenue will increase in both the large and small regions. This point is thus Pareto-efficient because there is no other strategy choice that makes both players better off. Tax competition is therefore inefficient. Kanbur and Keen (1993:889) offer two criteria to determine the optimality of coordination, viz. Pareto-efficiency and joint product or revenue maximisation. In the latter instance it is possible to make compensating transfers between the revenue-losing and revenue-gaining regions.

#### **2.4.3 The equivalence theorem and optimal taxation**

If no lump sum or neutral instruments are available, the Nash equilibrium is disturbed by a commodity tax wedge that is driven between consumer and producer price. This involves a welfare loss and constitutes a distortion. In an open economy, however, tax differentials across borders may involve additional distortions, viz. cross-country differences in the MRS (inefficient allocation of world consumption); and cross-country differences in producer MRT (inefficient

allocation of world production).

The equivalence theorem is related to the present discussion. This theorem examines the equivalence of the general origin (production tax) and destination (consumption tax) principles. This analysis entails an investigation into the effects of switching from one (in this case the destination) to another (the origin) principle. The adoption of the general origin principle introduces a wedge between producer prices that is the factor  $(1/(1 + t_{go}))$ , where  $t_{go}$  is the country's origin tax rate, and consumer prices remain unchanged. The tax does not affect the consumer price, but affects the relative producer price and the composition of production, unless the tax rates within a country are uniform. If the distribution of tax revenues does not affect demand, the patterns of production, consumption and trade will also be the same if the tax rates in the home and in the host region differ. Since international prices do not change, the tax reduces the factor income by  $1/(1 + t)$ , where  $t$  may be different in the home and the host region. Since factor supply is supposed to be inelastic the pattern of production is not affected.

As regards the destination principle, consumer prices are multiplied by the tax factor  $(1 + t_{gd})$ , where  $t_{gd}$  represents the country's destination tax rate, and producer prices are unaffected. Whatever the national levels of tax rates, so long as the rates are uniform within the countries, the domestic gross and net price ratios of any two commodities will be identical. With *flexible exchange rates*, the rates of exchange towards the rest of the world will fall by  $(1/(1 + t))$  so that after the exchange rate adjustment consumer prices are unchanged and producer prices fall by the tax factor. Price level or exchange rate adjustments alone would be sufficient to compensate for the switch - the origin and destination principles are therefore equivalent. Uniformity of taxes is thus required. This argument dates back to Tinbergen (1953) who first referred to uniform indirect tax. The equivalence theorem conforms to the findings of Whalley, 1979; Grossman, 1980; and Berglas, 1981. These findings rest upon the assumptions of free trade, absence of transport costs and tariffs, perfectly flexible exchange rates and the exchange rate being the ratio of the currency values. Cross-country differences in factor income burdens may result from different taxes. If factors move across borders in response to these differentials, production patterns will change and the equivalence result will no longer be obtained. One of the problems with the equivalence theorem arises because of the assumption that commodity taxes within each region are uniform.

It may happen that some goods are taxed while others are not, eg VAT on consumption but not

on investment goods. Sinn (1990) argues that in this case, a switch in principles will have real effects. Under the origin principle, this means that the producer relative price between consumption and investment goods will be higher in the country with the lower VAT rate, so that it will overproduce consumption goods; while the other party will overproduce investment goods. Only with a general commodity tax (ie a true production tax with a uniform tax rate if there are no intermediate commodities) will the equivalence argument hold. Differently interpreted, this means that general taxes imposed on a broad base (VAT) and at a uniform rate resemble lump-sum taxes and are efficient.

Optimal taxation (see also section 2.3.2.1), however, provides convincing arguments on the grounds of efficiency and equity that refute the notion of uniformity. In this regard, the inverse elasticity rule (Ramsey rule) states that the excess burden of selective taxes can be minimised when price-inelastic goods and services are taxed at higher rates. The rule therefore calls for higher taxes on inelastic (immobile) tax bases and lower taxes on more elastic (or mobile) tax bases. The theory of the second best is again applicable (Rosen 1998). When distributional considerations (vertical equity) are taken into account, Newbery and Stern (1987) argue that the Ramsey rule has to be reversed (for instance, in the case of developing regions). Again trade-offs between efficiency and equity will have to be made, depending largely on government's priorities. The argument, however, holds that uniform taxation is not always desirable. Such taxation will require that a system of lump-sum transfers to households be in place already. In order to minimise inefficiency (ie the excess burden), different tax rates should be applied to different commodities. This rule can also be applied to different types of capital (real and financial investment). The system, however, entails more administrative difficulties because information is required on elasticities and patterns of complements and substitutes. This is not always readily available.

The efficiency gains from designing a system similar to the Ramsey rule will have to be weighed against the costs of administering such a system. Tax harmonisation is normally seen as a viable solution. Commodity taxes can be lumped together into large categories of commodities, subject to uniform ad valorem taxes. Another option for equity could be achieved through a combination of differentiated or uniform excises on luxuries, and a uniform VAT rate. These options are, however, analytically and empirically problematic. The loss of economic efficiency due to VAT is likely to be minimised when uniform rates or only three or four rates are applied to the broadest possible base.

In summary, Kanbur and Keen's (1993) analysis corresponds with Mintz and Tulkens' (1986) and Lockwood (1993) in the sense that they all investigate the non-cooperative outcome when each government behaves in a Nash manner, ie all investigate the best responses or reaction functions of the governments involved. In comparison to Kanbur and Keen (1993), Lockwood (1993) studies the effect of switching from the destination to the origin principle on non-cooperative or Nash equilibriums (currently under revision in the European Union). When taxes are constrained to be uniform across commodities, the switch has no effect. When differentiated taxes are allowed, the effects of the switch depend on whether countries are large or small (see Sinn, 1990). In both cases, the switch imposes the requirement that taxes be uniform across commodities within each region. Two further effects of the switch occur, viz.: (1) negative spillover effects; and (2) incentives to manipulate the private consumption effect (terms of trade) are changed. The switch therefore does not necessarily lead to a fall in all tax rates.

Commodity tax competition models are associated with tax rate differences that are sufficiently large to overcome transport costs. Transport and transaction costs can have a definite effect on consumption, but these should not be overestimated (Sinn 1990). The low-tax region "exports" the goods to cross-border shoppers from the high-tax region (see de Crombrughe & Tulkens 1990; Lockwood 1993). A rise in the high-tax region's tax rate raises the amount of shopping done by its residents in the low-tax region, thereby increasing the latter's tax base. This tax base change is known as the "public consumption effect". This represents a positive externality, implying that the high-tax region's tax rate is inefficiently low (identical to the discussion on capital income taxation). A national or supra-national government can force the regions involved to change their tax rates in directions that leave both better off. Any such tax changes will, however, involve an increase in the high-tax region's tax rate and be efficiency enhancing.

This efficiency-improving tax change would not necessarily involve an increase in the low-tax region's tax rate (Haufler 1998:143). If the low-tax region increases its tax rate, it not only creates the public consumption effect mentioned, but also a private consumption effect. This effect consists of the welfare loss that cross-border shoppers experience from the increased price of the private consumption good. As a result of these conflicting effects, it is possible for the increase in the low-tax region's tax rate to harm residents of the high-tax region when the marginal transaction cost is sufficiently elastic with respect to the level of cross-border shopping. It is therefore impossible to show that both regions set their tax rates at a too low equilibrium level.



## 2.5 OVER-TAXATION

The main argument of most tax competition literature is that tax competition leads to inefficiently low taxes. In contrast, two types of tax competition have been found to produce inefficiently high taxes, viz. double taxation conventions and vertical tax competition.

### 2.5.1 Bond and Samuelson (1989)

As mentioned in section 2.3, there is a common-agency problem in the taxation of multinational corporations (MNCs). The home country attempts to tax foreign-source income and a situation develops where the home and host countries tax the MNCs income. Double taxation relief of some kind has to be offered in such a way that will be equitable for both countries but also for the MNCs. The formal analysis of how governments choose their tax policies under double taxation relief commences with Bond and Samuelson (1989). Double-taxation relief falls into three categories: First, the home government provides a tax credit for taxes paid to the host government. Second, it allows foreign-source investors to deduct these taxes from their taxable income. Finally, it exempts foreign-source income from taxation. Of these three methods, the deduction method is the least commonly used. In this case, investors are allowed to deduct the host country taxes from their tax base when the domestic tax liability is assessed.

A tax credit is regarded as a double-taxation relief measure and taxes paid to the host government reduce the tax liability at home. Limits on these tax credits do exist since governments do not rebate tax payments to a firm when the host country's tax is higher than the home's tax (excess credit position). When governments assess their respective tax liabilities, the higher of the tax rates is the effective one. This is known as a partial tax credit. When there is no limit on the tax credit (a full tax credit), it is always the home country's tax rate that is the effective one (pure residence principle).

Musgrave (1967) argues that capital-exporting countries will generally find tax deductions rather than tax credits in the national interest because tax credits surrender tax revenue from foreign income to the foreign country. In contrast, Hamada (1966) finds that a tax credit system can allow both home and host countries to be better off than in a tax deduction system. This possibility arises from the ability of the tax credit scheme to yield an efficient allocation of capital.

Bond and Samuelson (1989:1101) examine the welfare of a capital exporting (home) and a capital importing (host) country under tax credit and tax deduction<sup>14</sup> systems. A similar model to that of Hamada (1966) and consequently Zodrow and Mieszkowski (1986) is applied and the following assumptions are utilised throughout the analysis:

- (a) A two-country model in which both countries choose tax rates on capital in order to maximise national income, is applied;
- (b) Each country has a perfectly inelastic supply of labour and capital. One good is produced using these two factors of production under conditions of perfect competition in the goods and factor markets;
- (c) The quantity of capital owned by the home (host) country is referred to as  $K$  ( $K^*$ ), and the quantity of labour in the home (host) country as  $L$  ( $L^*$ );
- (d) The production functions are denoted as  $F$  ( $F^*$ ) and are homogeneous and quasi-concave;
- (e) Technologies are allowed to differ between countries and the labeling of countries is chosen such that with international factor immobility, the gross return to capital in the foreign country,  $r^*=F_K(K^*, L^*)$ , exceeds that in the home country,  $r=F_K(K, L)$ ;
- (f) The home country is the capital-exporting country with  $Z$  denoting the amount of home country capital located in the host country;
- (g) The home country chooses a tax rate  $t$  on exported capital, while the host country sets a tax rate  $t^*$  on imported capital;
- (h) Countries can discriminate in setting tax rates on traded and non-traded capital, only exported (imported) capital is taxed by the home (host) country. Any tax that applies to all home-owned or host-owned capital will not affect the location decision of capital-owners;
- (i) If capital is traded, the capital market equilibrium condition is expressed as,  $F_K(K-Z) = F_K^*(K^*+Z)(1-t)(1-t^*)$ . This is equal to the after-tax rates of return on home country capital in the home and host countries;
- (j) Foreign taxes may be credited against domestic tax liabilities and in this case the capital market equilibrium condition is,  $F_K(K-Z)=F_K^*(K^* + Z)[1-t=\max(t, t^*)]$ . Only the higher tax rate will, therefore, have an effect on the location decision of capital; and
- (k) There is an asymmetry in revenue effects between countries when the two tax rates are not equal, ie if  $t>t^*$ . The level of taxes is determined by  $t$ , and  $t^*$  determines the division of revenue between countries. If  $t<t^*$ ,  $t^*$  determines the level of taxes and the

14 A tax credit represents a subtraction from tax liability, as opposed to a tax deduction, which represents a subtraction from taxable income.

home country receives no tax revenue. This rule is commonly applied in practice.

Home and host country reaction functions are investigated firstly under a tax deduction system, secondly under a tax credit system, and thirdly under a uniform tax system. It is concluded that the equilibrium under tax credits eliminates trade in capital, whilst both countries prefer the equilibrium in the case of tax deductions to a no-trade outcome. The equilibrium point, however, has important implications for the evaluation of tax credit and tax deduction systems. The equilibrium analysis, ie Nash equilibrium, reveals that tax credits, because they lead to the cessation of trade in capital, are best characterised as yielding an anti-trade bias. The home country will prefer a deduction system only if the tax rates and the capital allocation are fixed, and credits will be preferred by both countries only when tax rates are fixed and not in equilibrium.

In summary, the government utilises a capital income tax, revenues add to national income, and a perfect discrimination of inward and outward investment is applied (see also Mintz & Tulkens 1990; Gordon 1992). Tax deduction and tax credits as forms of double taxation relief, are applied. Nash equilibrium in tax rates is applicable. If the home country provides tax credits, then the Nash equilibrium involves taxes so *high* that all international capital flows cease. In contrast to Zodrow and Mieszkowski (1986), the problem here is not that taxes are too low, but rather that they are too high.

The host country has an incentive to raise its tax rate at least to the level levied by the home country, since the latter's government treasury effectively pays the tax by providing tax credits to foreign investors. However, as long as capital exports occur, the home country has to keep its tax rate on foreign-source income above that of the host country. This allows the country to exercise its market power on the world capital market, ie to drive the equilibrium after-tax return on capital up by reducing incentives to invest abroad. As a result, capital tax rates are so high in equilibrium that all capital exports cease. Tax deductions are thus preferred because capital flows still occur under this system but not under tax credits (Bond & Samuelson 1989). The problem here is not that the tax rates are too low but rather that the relative tax rates induce the home country to export too little capital, ie capital flows cease under tax credits. Although a striking result, it is in stark contrast to reality with tax deductions being used rarely if at all by home (capital-exporting) countries (Alworth 1988).

Janeba (1994) considers the case where no discrimination occurs, whilst the aforementioned analysis allows the home country to tax the domestic and foreign-source income of its residents at different rates. Double taxation treaties can be understood as a form of cooperation, as governments sign a contract that specifies (withholding) tax rates and the form of double taxation relief in such a way that both countries benefit. In this case, the home country sets its tax rate equal to zero under both the tax credit and exemption methods. The capital-importing country sets a positive tax rate, thereby improving terms of trade. The idea is that the positive tax rate will increase capital exports, creating undesirable terms-of-trade effects in the home country. It is argued that the clear advantage of a tax credit over tax exemptions and tax deductions is that neither fully harmonised tax rates (as under exemptions) nor side payments (as under deductions) are necessary. This model provides a theoretical solution to the Bond and Samuelson model but under all of these methods, the equilibrium tax rates continue to be inefficiently set. This result is similar to that obtained under capital income tax competition and can be extended within an asymmetric framework.

### 2.5.2 Keen and Kotsogiannis (1996)

Apart from interjurisdictional (horizontal) tax competition discussed thus far, *intergovernmental (vertical)* tax competition also exists. The first type of tax competition takes place between governments at the same level whilst the second takes place between governments at different levels. Obviously the chances of vertical and horizontal tax competition emerging increase the more decentralised a system becomes. Higher levels of independence are assigned to lower levels of government with the best-case scenario being a federation or an economic union. A major tax assignment problem develops here, with each level of government imposing a tax on the same tax base, ie *tax base sharing*. Concurrent or linked taxation<sup>15</sup> between supra-national or national governments and subnational governments is thus involved. Subnational capital income taxes (state corporate taxes in the US) and subnational commodity taxes (state VAT in Brazil) are well-known examples. Concurrent taxation also occurs where the base of a tax levied by one government is statutorily linked to a tax levied by another government, eg tax deductions.

In order to determine individuals' or corporations' national (federal) tax liability, state and local taxes already paid are deducted from the federal income tax in the US. Double taxation relief as described in section 2.5.1 also falls into this category. In contrast to horizontal tax competition

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<sup>15</sup> Distinct levels of government co-occupy the tax base and exercise some discretion in levying taxes.

where one subnational government's tax increases the tax base available to another, the tax imposed by one level of government diminishes the size of the tax base available to the other level of government. In the case of capital income taxation, for instance, the rise in the national government's tax rate reduces national savings, thereby lowering the amount of capital available to each subnational government. A rise in a single subnational government's tax rate has a similar, but lesser effect, in that it reduces the tax base available to the federal government. The presence or absence of an overarching federal government therefore makes a profound difference to tax analysis, policy, design and evaluation (Keen 1998:470). Where no such government exists, ie where independent countries in an economic union are involved, members would ignore the benefit (positive externality) that they confer on each other and outside countries, by raising their tax rate. Own tax revenues would therefore decrease (section 2.3). Where an overarching federal government is involved, intensified horizontal tax competition within the country would mean the opposite, ie increased tax revenues. The reason is that the more subnational governments compete (setting lower tax rates) the closer the position of the Leviathan federal policymaker comes to that of a monopolist.

Tax increases by subnational governments would thus create negative instead of positive externalities for other governments. The reverse argument that taxes are set too high now holds. This argument has, however, to account for the objectives of the national and subnational governments. A benevolent or responsive national government would want to optimise the aggregate welfare of all residents, whereas a subnational government would want to optimise the welfare of the subnational government's own residents. In some cases, where conflict arises, it may be necessary to coordinate these actions through specifically matching grants (see Dahlby 1996).

Dosser (1967) suggests that the distinction between issues of fiscal federalism and international taxation are often unrecognised. Under the theory of fiscal federalism, it is assumed that the national government acts first, committing itself to a set of policies that subnational governments treat as fixed when choosing their own policies. Horizontal tax competition models, however, assume that all governments choose their policies simultaneously (the so-called sequential games), whilst others are even simpler, assuming that actions are once off (see section 2.3.1.1 and the "prisoner's dilemma"). The so-called repeated games may be utilised in a more complicated setting, where subnational governments may react to the past decisions of the national government and also make new decisions that influence the national government's

future behaviour. To keep things as simple as possible, the best case for efficiency will occur when the federal government is benevolent and is able to move first (almost like a Stackelberg leader), so that it can influence the behaviour of the subnational government. The Stackelberg leader corresponds to a game where one player gets to move first and the other player responds. Quantity or price leadership can be applicable and in this situation, one player is the leader and the other player is a follower.

Boadway, Marchand, and Vigneault (1998) consider the case where the federal government and identical states utilise an income tax that redistributes income among a diverse set of residents. Two cases are considered, where migration is possible; where it is impossible, with the former allowing for horizontal tax competition. In both cases the equilibrium is efficient given the available policy instruments, ie the federal government could do better if it directly controlled the states' policy instruments. It is argued that an individual state engages in vertical tax competition by not accounting for the negative effects of its tax on the federal budget.

Vertical tax externalities may induce states engaging in excessive redistribution by, say, increasing the tax rate, perceiving part of the revenue cost to be passed on to the federal government and thereby to other states. The federal government has, however, sufficient tax tools and foresight to undo any inefficiency in state government behaviour. In conclusion, vertical tax competition seems to take place at the state level but not at the federal level, because the federal government "sees through" the state budget constraints when it makes its own policy choices. The result is an efficient equilibrium that is not always feasible in reality.

Keen and Kotsogiannis (1996) provide an example of the inefficiencies that can result when governments are no longer benevolent or responsive. In this model, the federal and state governments care only about maximising tax revenue. Although both horizontal and vertical tax competition exist, the vertical tax competition problem dominates in the case where all governments move simultaneously. The equilibrium tax rates are found to be too high, even relative to those that maximise tax revenue.

Wilson (1999) argues that vertical tax competition is more likely to create inefficiencies in models where the national (federal) government is unable to influence the choice of policy instruments by local governments optimally, due to commitment or information problems, or objectives other than welfare maximisation.

## 2.6 VARIOUS FORMS OF TAX EXTERNALITIES

Various forms of externalities have been described up to this point in the discussion. Interjurisdictional or interregional fiscal externalities have been described where one region's public policies affect government budgets in another region. A region can, for instance, lower its tax rate on mobile capital, thereby gaining capital at the expense of other regions. This will erode other regions' tax bases and cause their tax revenues to decline. These externalities are present in tax competition models because governments are assumed to have limited taxing powers. Where regions are large enough to affect the product or factor prices (ie the elasticities of supply and demand of factors of production) confronting other regions, pecuniary externalities develop. These externalities lead to inefficient policy differences across regions, causing a misallocation of factors of production.

In summary, fiscal externalities can occur when a government's tax (and expenditure) decisions affect the wellbeing of taxpayers in other regions. This can take place either *directly* by changing its consumer or producer prices or its public good provisions (utility functions of nonresidents), or *indirectly* by altering the tax revenues or expenditures (budget constraints) of other governments (Dahlby 1996:398)<sup>16</sup>. These externalities can either be horizontal (interjurisdictional) or vertical (intergovernmental), when governments on the same level are involved, or governments on different levels are involved, respectively. Horizontal externalities are either direct or indirect, whereas vertical externalities are always indirect. Horizontal tax externalities can be internalised or prevented horizontally as well as vertically, but vertical tax externalities can only be internalised or prevented vertically.

There are various forms of tax externalities; horizontal (secs 2.3 and 2.4) between independent countries (or economic community) but also within one country (or economic community); and vertical (section 2.5.2) within a country (or economic community). The social marginal cost of public funds (SMCPF) is brought into the picture. Tax externalities distort fiscal decisions if the perceived marginal cost of public funds (MCPF), ie the economic cost to taxpayers of raising an additional dollar of tax revenue, deviates from the SMCPF. The latter takes into account the erosion of other tax bases and thus the effect of a tax change on all taxpayers and on all governments' budget constraints (Dahlby 1996:399).

**Table 2.2: Tax externalities**

<b>TAXES</b>	<b>KEYWORD</b>	<b>TAX EXTERNALITY</b>
<b>EXCLUSIVE</b>	Tax exporting "Taxiffs"	Horizontal (direct) Horizontal (direct)
<b>CONCURRENT</b>	Tax base sharing	Vertical
<b>CONCURRENT/LINKED</b>	Tax crediting	Horizontal (indirect) Vertical
<b>COMPETING TAXES</b>	Tax competition	Horizontal (indirect) Vertical

**Source:** Adapted from Groenendijk (1998).

The different taxes levied by, or taxing powers (specifically within an independent region) granted to governments, create the possibility of tax externalities (table 2.2). In this chapter, the emphasis is on the possibility of tax competition (tax base flight) occurring, although tax exporting<sup>17</sup>, "taxiffs"<sup>18</sup>, tax base sharing<sup>19</sup> and tax crediting<sup>20</sup> are discussed briefly because they are integral to tax competition. Horizontal tax competition<sup>21</sup> leads to an over-estimation of the SMCPF (in reality:  $SMCPF < MCPF$ ) and thus an undersupply of public services (taxes are too

16 See also Rose (1987) and Gordon (1993) for discussions on the various externalities that can arise within a decentralised setting.

17 When one government has the exclusive right to tax an economic activity or income source, it can choose to shift the burden of that tax to residents of another jurisdiction. In this case, involved governments have to have some degree of market power. The opposite can also occur, viz. tax imports. Only the net tax exports are relevant for prevention.

18 When a government has the exclusive right to tax the import, trade and export of goods and services within its borders, trade barriers can be set up when using these (indirect) tax structures to discriminate between domestic and foreign goods and services, for instance import duties. Differentiated VAT structures and rates (excises), as partly discussed in section 2.4, can also be used as protective mechanisms (as in the case of tariffs). In the EU, for instance, some wine producing areas (France, Spain) still impose low VAT on wine but high VAT on beer. Germany uses the opposite mechanism because it is a beer-producing region. These regions, however, have to possess some degree of market power.

19 An activity or income source is taxed by one or more lower levels of governments or national governments, and by a national or supranational government (see section 2.5.2).

20 The base of a tax levied by one government is statutorily linked to a tax levied by another government (see section 2.5.2). The deductibility of taxes, as in the US, is sometimes also regarded as an indirect case of tax exporting.

21 Horizontal tax competition arises when capital, commodity or core taxation in a region causes the tax base - either the input itself or its income - to shift to other regions. When a jurisdiction increases its tax rate, the base flees to another region, thereby making the recipient better off either in terms of additional tax revenue or a greater amount of income earned by residents. Vertical tax competition arises when capital income, commodity or core taxation of a subnational government causes the tax base, and therefore the revenue collected from it, available to the supranational or national government to disintegrate. The disintegration obviously depends on the degree of taxing autonomy granted to the subnational government (see section 2.5.2).



low) that is in contrast to the other categories of tax externalities.

The other categories of tax externalities, including vertical tax competition, lead to an underestimation of the SMCPF (in reality:  $SMCPF > MCPF$ ) and consequently an over-supply of public services (taxes are too high). These tax externalities can therefore offset, but not eliminate, the negative impact of horizontal tax competition. The reason is that these externalities, notably tax exporting and “taxiffs”, depend on the elasticities of demand and supply of the factors of production (capital and commodities) involved and thus require market power in order to influence factor prices. The reverse argument may also hold, in that horizontal tax competition can balance or offset the negative impact of the other tax externalities (including vertical tax competition). Horizontal tax competition can be advocated to counter the over-expansion of the public sector resulting from other tax externalities. It can also counter an over-expansion due to the pursuit of own interest by exploitive or Leviathan bureaucrats and politicians (sec 2.7.4).

## **2.7 EFFICIENCY- AND WELFARE-ENHANCING TAX COMPETITION**

The analysis up to now has focussed mainly on inefficient and wasteful tax competition. There are exceptions, for instance tax competition may be beneficial in small regions for broadening tax bases and the idealised tax competition setting of Tiebout (1956). More recently, it has become a generally accepted way of thinking that tax competition may in fact be efficiency- and welfare enhancing.

### **2.7.1 Competitive bidding for firms**

Competitive bidding for firms for automobile plants in general by subnational governments, eg in US states, entails large increments of investment compared to small increments in previous discussions. The effect of tax competition on public services provided to residents is no longer the central issue. In this case, the main issue is whether the subsidies or tax breaks provided are efficient in the sense that they lead to efficient firm location decisions while not creating any unnecessary costs for the system of regions as a whole. The efficiency of tax breaks or tax holidays have been much debated, also on an international level where capital-importing countries levy zero or even negative effective rates in an attempt to attract direct or real

investment<sup>22</sup>.

Black and Hoyt (1989) analyse two regions competing for a large firm. The latter's presence attracts more residents, which reduces the average cost of providing a public service to existing residents. It is assumed that each resident pays a tax equal to the per capita cost of public service provision that is below the marginal cost. The bidding for firms never reduces the social efficiency of the firm's location, and in some cases, this bidding causes firms to locate more efficiently. The use of public services to compete for firms will not produce an efficient outcome. The firm's location decisions are inefficient in cases where the firm possesses private information about how its production costs differ between the two regions. It is unable to reveal these costs to the two regional governments.

King, McAfee, and Welling (1993) also depart from the Tiebout model by introducing uncertainties about firm productivity. The social value of a firm is given by the "surplus" that it generates by producing in a region, but the exact surplus is unknown to both the firm and regional governments prior to actual production. Two regions compete for the firm over two periods. After choosing a location in the first period, the firm is free to relocate (at a cost) in the second period. The firm's location in each period is determined by an auction mechanism, and this location is found to be efficient. Each region can also be allowed to invest in "infrastructure". If this is the case (before the auction takes place), the two regions play a Nash game in investment levels, under which each region sets its investment level optimally, given the level chosen by the other region. The results show that only an asymmetric Nash equilibrium exists, where the equilibrium investment levels differ. In the first period, the firm locates where investment is highest. The losing region may, however, choose a positive (but lower) investment level, because this raises the probability that the firm will switch locations in the second period. The possibility of relocation implies that the losing region's investment is not socially wasteful. The equilibrium is thus efficient.

Concerning tax holidays, the standard explanation for the existence of these incentives is based on the outcome of bilateral bargaining between the host country government and a firm. The firm can extract a subsidy from its host, but after the firm sinks its capital in the host country's soil, the bargaining power of the government is strengthened, inducing it to renegotiate for higher taxation. A subsidy is thus followed by taxes, resembling the temporary tax concessions that

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22 This issue will be discussed in greater detail in chapter 3.

characterise tax holidays (Bond & Samuelson 1986; King & Welling 1991; King, McAfee & Welling 1993; Doyle & Van Wijnbergen 1994). In contrast to this, using modified assumptions, Wen (1997:144) argues that a tax holiday can have a definite positive effect. It can signal permanence in government intent concerning future tax policy, so much so that a subsequent tax reform effort would eliminate tax holidays but reduce the statutory tax rate to attract foreign investors.

The discussion thus far in this section follows the original line of thinking (secs 2.3 and 2.4) by assuming that each government is concerned with the welfare of its own citizens. Biglaiser and Mezzetti (1997) investigate a model in which attracting mobile firms provides a state governor with the opportunity to engage in activities that imperfectly signal his “ability” to voters. When two or more governors with re-election concerns compete for firms, the resulting location of the firm will not necessarily be efficient. Such inefficiencies are, however, associated with imperfect political institutions, which can also be observed from the original Tiebout model.

Wilson (1999) argues that interregional externalities may apply an important efficiency-enhancing role, even in cases where subsidies can be targeted to individual firms. Such externalities can easily result in too little competition for firms. This relates to pecuniary externalities already discussed, in the sense that by “importing” the firm, a region creates desirable price effects for other regions eg lower transport costs. The converse could also apply: If all regional governments compete for a foreign firm that faces limited opportunities for locating its plant outside the country, these governments will possess market power that can be exercised by competing less vigorously. Competition for foreign firms through the provision of subsidies may be better than no subsidies, but the equilibrium levels of these subsidies are not likely to be optimal or efficient from a national point of view.

### **2.7.2 Imperfect competition and imperfect mobility**

Section 2.3 and in part section 2.5, describe the strategic use of capital income or corporate taxation in the presence of capital mobility. A standard neoclassical argument with perfectly competitive markets is applicable. In some of these analyses such as Hamada (1966); Bond and Samuelson (1989); Mintz and Tulkens (1990) and Gordon (1992), a standard neoclassical trade model is utilised. This model explains foreign direct investment as capital transfer induced by differences in factor abundance. Governments try to change the terms of trade in the capital

market and set tax policy strategically.

The above assumptions are in sharp contrast to the widely accepted view of new trade policy literature. Dixit (1984), Brander and Spencer (1985), Eaton and Grossman (1986) and Helpman and Krugman (1989) emphasise that the market structure in which multinationals operate is rather oligopolistic. The assumption of imperfect competition has led to a fundamental change from a free-trade attitude to an interventionist view. Since there are only a few countries that are capable of producing highly sophisticated technological goods, it might be in the interest of a country to concentrate market power in the hands of a single firm. Governments have an incentive to use trade policy as a strategic instrument in imperfectly competitive markets. This policy, better known as profit-shifting, is based on the following: when exporting firms, that are located in different countries, compete in a third country's market, the government's optimal policy involves paying export subsidies (Cournot competition, 1883)<sup>23</sup> or levying export taxes (Bertrand competition, 1883)<sup>24</sup>, although the direct benefits of the subsidy exactly offset the government's costs.

The profit-shifting policy may also be understood as a shift from equilibrium without intervention to equilibrium in which the subsidised (taxed) firm or government acts as if it is a Stackelberg leader relative to the other firm, thereby raising national welfare. The consequence is intervention by many governments, which results in an international distributional conflict with respect to the economic rents in imperfectly competitive markets. Economic rent refers to a factor's earnings over its opportunity cost, ie those payments to a production factor that are in excess of the minimum payment necessary to have that factor supplied. The case of imperfect competition was ignored in literature on the taxation of FDI or foreign source income, until authors such as Brander and Spencer (1987), Levinsohn and Slemrod (1993), Janeba (1994) and Schulze and Koch (1994) opened the investigation.

When firms are sufficiently large (monopolies, duopolies or oligopolies), the issue of imperfect competition becomes potentially important. Janeba (1994) attempts to combine tax competition with new trade literature. New trade theory emphasises the relevance of imperfect competition in the goods markets for the taxation of multinational firms. Tax competition literature, but not new trade literature, focus on the mobility of capital/firms in response to tax differences. Imperfect

23 A game of simultaneous quantity setting applies, where it is assumed that firms choose their quantities but let the market determine the price.

24 A game of simultaneous price setting applies, where it is assumed that firms set their prices and let the market determine the quantity sold.

competition and the mobility of firms are thus analysed. A strategic trade model is utilised by specifying two countries, each containing a single firm that sells output in a third market. The two governments compete by offering subsidies to their firms. Each firm is then allowed to be mobile between the two countries, meaning they locate where their after-tax profits are the highest. The governments recognise that their subsidies will affect not only firm output decisions, but also location decisions. Each government may seek to attract the other country's firm and thereby capture some of its profits through taxation. An important assumption is that the tax system is non-discriminatory, ie each country imposes the same tax rate on the outputs of all firms that operate within its borders, whether domestic or foreign (see also Janeba & Peters 1999)<sup>25</sup>.

In summary, competition for mobile firms causes the countries to compete their tax rates down to zero. No country offers a tax rate below zero, because it would then attract both of the firms but be hurt by the transfer of subsidy revenue to the foreign firm. The zero-tax result is also extended to include cases where the firms' outputs are sold to the consumers in one of the two countries, rather than the third country. In this case, the country containing these consumers cares about consumers' surplus, along with tax revenue and its firm's profits. The equilibrium is not fully efficient in either of these cases since inefficiencies associated with imperfect competition are still present, but tax competition does improve welfare. Within a multi-stage non-cooperative game it is shown that *laissez-faire* is the perfect equilibrium (in many cases the only) of the game. This result is in contrast to both new trade theory and literature on tax competition.

The characteristics of this perfect equilibrium are that governments face few information problems regarding demand and cost parameters, the objective functions of the opponent government, the strategic variable of the firms, and the location of demand. Mobility leads to a Pareto-improvement upon the situation where the location is fixed. Subsidies are reduced rather than increased and economic rents are not eroded by tax competition. Lee (1997:238) investigates tax competition with imperfectly mobile capital, mobility being imperfect because of transaction costs. The imperfect mobility of capital may lead to an over-provision rather than underprovision of public goods, and may make jurisdictions compete more aggressively for

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<sup>25</sup> In practice countries are restricted to discriminations in ways set out by the non-discrimination rules established by international agreements such as GATT (now the WTO) or the laws of the EU and federations such as Canada and the US. Apart from these rules, countries do, to some extent, discriminate between domestic and foreign firms (section 4.4).

capital. Tax competition is therefore able to play an efficiency-enhancing role under the assumptions of imperfect competition, but not in a perfectly competitive environment where capital is perfectly mobile as discussed in section 2.3.

### 2.7.3 Commitment problems and tax incentives

In section 2.3, it is assumed that governments commit to a tax system, and then capital owners make their investment choices. Commitment in this context refers to the ability of host governments to commit to future tax policies as an explanation for a change in tax rates over time. A government therefore also has to commit itself to future tax policy issues because once a firm (active or real investment) has established itself within a region that capital becomes partially immobile. A government can, for instance, commit to initial subsidies or tax holidays for new firms, thereby shortening the duration of the commitment (Janeba 1994).

One of the major disadvantages of tax breaks is that some fraction of the firms may choose to leave a region after the initial tax break has expired, perhaps seeking tax breaks in other regions<sup>26</sup>. The firm's turnover will therefore become excessive via such a move (Bond 1981 presents empirical evidence).

Vigneault (1994) suggests that if tax competition arises between the host and home countries: (1) the source principle is compatible with a Nash equilibrium, (2) supposing the source principle is adopted for the commitment and non-commitment cases, it is optimal for the home country to exempt domestic investment income, and (3) if the source principle is adopted with non-commitment, optimal policy for the host country depends primarily on the rates at which the home government credits taxes paid in the host country. This analysis links to further studies, eg Janeba (1994, 2000).

Janeba demonstrates that tax competition may help to solve commitment problems. A one-firm, two-region model is investigated in which decisions are made in three stages. First, the firm undertakes a single project consisting of investment in capacity in each country. Oil pipelines or mine shafts are examples. Second, each government chooses the rate at which to tax the project

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<sup>26</sup> One of the most recent examples in South Africa involves the firm BayGen (Freeplay), a firm manufacturing radio technology using solar energy. The firm received a variety of advantages to provide jobs for the physically handicapped but after receiving these advantages, relocated to China.

output within its borders (source principle). Finally, the firm chooses its output. A commitment problem arises because the governments are able to choose tax rates after the firm has fixed its capacity levels. If a single government has been involved, it would have an incentive to tax all profits away. The firm will recognise the incentive at the time of its initial investment decision and choose not to invest in capacity. When two governments are involved, they will compete in tax rates if the firm has excess capacity and is therefore able to reallocate output between two regions in response to differences in tax rates. Provided investment (capital) costs are sufficiently low, the firm then chooses to undertake the project by investing in excess capacity as a means of creating tax competition.

Janeba (2000) provides an explanation as to why certain empirical evidence has found little support for the role of taxation and political risk as determinants for FDI. A multinational corporation (MNC) normally faces the following decisions. It may invest only in a politically stable, but high-cost location; it may invest the efficient amount in an unstable, low-cost location, but holds simultaneous excess capacity elsewhere; or invest only, but too little, in a less costly and an unstable location. The last case only arises when upfront subsidies are available<sup>27</sup>. Footloose industries like electronics are good examples of simultaneous investment and production in various locations.

The power to shift production quickly may explain why less *tax incentives* are given and political risk seems to play less of a role. For instance, automobile corporations invest and produce in politically risky countries in their quest to become global leaders. Where cost advantages in these countries exist, capacity is underutilised in some cases. Plants are therefore still held in politically stable countries in order to be not completely dependent on a single government. In contrast to an investment tax (source principle), a saving tax (residence principle) can also be chosen (Kehoe 1989).

Kehoe (1989) shows that when benevolent policy makers are faced with a time-inconsistency problem in the setting of their capital tax rates, the downward pressure on taxes associated with tax competition can act as a commitment mechanism; in such an environment, tax coordination

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<sup>27</sup> These scenarios can be made applicable to various developing countries, more specifically African countries, where the attraction of FDIs is problematic (UNCTAD 1999). More notably, the latter scenario can be applicable to countries such as Zimbabwe where, although tax holidays are provided, uncertain credibility (political risk) has played an increasingly important role. Neighbouring members of the Southern African Development Community (SADC), most notably its biggest trading partner, South Africa, is directly and indirectly confronted by negative spillovers. South Africa has done away with tax holidays but in the most recent budget, job subsidies, have been re-introduced.

may be efficiency-worsening. If the two countries collude in setting their tax policies, then they tax away savings, since savings are fixed at the time taxes are chosen. Nobody choose to save. Tax competition is preferred, because governments forego investment taxation in an effort to attract investment. The efficiency-enhancing properties of tax competition are therefore again emphasised.

#### 2.7.4 Political economy

In sections 2.3 and 2.4, it is assumed that governments are responsive and seek to act in the best interests of an identical set of residents or factor owners. Differences between residents or factor owners, ie voter preferences, are therefore not included. Tax competition is thus, in most cases, regarded as inefficient.

Public choice theorists, Niskanen (1971) and Brennan and Buchanan (1977), are the first to view politicians or bureaucrats as Leviathans that exploit taxpayers and maximise tax revenues in order to increase the budget for their own satisfaction (ie up to the point where  $MB=MC$  and not where the socially efficient point is reached,  $MB>MC$ ). It is argued that tax competition can improve welfare because the size of a government will be excessive without tax competition. Naturally, the argument should be more powerful in societies where the mobility of factors of production across jurisdictions is high, as in the US, and less so in societies where the mobility of factors of production is smaller, as is probably the case in unitary and less developed federations such as Latin American countries (chs 4 and 5). The objective of a Leviathan is therefore explored in a tax competition context. Tax competition is regarded as a remedial policy.

Competition amongst jurisdictions should, as in the case of the private sector, lead to pressures in order to increase productivity, reduce costs, and avoid becoming uncompetitive relative to other jurisdictions. The under-supply of public services can be used as a measure to contain an over-expansion of the public sector. In the presence of competition, it is thus realistic to argue that politicians and bureaucrats tend to respond to the wishes of their electorate, while at the same time Leviathan's tendency to tax and to spend excessively, is limited. In this regard, to cite McLure (1986): "What is good for the private goose is good for the public gander". Competition is therefore as healthy and beneficial between governments as between private economic agents. It should be noted that McLure does not argue that subnational governments should tax mobile factors, although he does note that if such governments use origin- or source-based taxes, tax



competition may be beneficial. Throughout these models it is assumed that governments retain some degree of benevolence or responsiveness seemingly caused by re-election concerns. Edwards and Keen (1996) re-evaluate views concerning the Leviathan government that emerges as a source of inefficiency. They find that tax competition can act as a useful constraint on benevolent policy-makers to provide services to citizens only up to the point where the benefits still exceed the costs.

Empirical difficulties have arisen in ascertaining whether tax competition is in actual fact welfare-enhancing or welfare-worsening. These difficulties relate to a search to determine whether there is a relationship between government size and the decentralisation of fiscal decisions among independent governments, and obviously the welfare implications connected to such a relationship. Oates (1985) finds no empirical evidence to support the Leviathan hypothesis. More recent studies such as those of Marlow (1988), Grossman (1989) and Ehadie (1994) find empirical support for the Leviathan by using both time-series and cross-sectional data. In fact, Oates and Swab (1988) argue that tax competition is efficiency enhancing and not a source of distortions in resource allocations, where local fiscal and regulatory decisions maximise not only the welfare of local residents but also future generations. Tax competition does not lead to a collapse of public good supply nor does it make redistribution by fiscal authorities impossible (Kirchgässner & Pommerehne 1996:361; Huber 1999:441).

The economic and political environment should always be taken into account. This also relates closely to commitment problems. Regional integration changes a country's domestic political equilibrium by changing the voters' preferences for their elected government representatives. The consequence is downward pressure on capital taxes as more and more countries compete to attract foreign capital. Voters are not identical and thus react to this by voting rather for governments with preferences for higher capital income taxes, ie redistributive tax policy (Persson & Tabellini 1992:700; Hindriks 1999).

In the search for a positive political theory of local governmental behaviour, interjurisdictional competition does not pre-determine the outcome, ie "Tiebout needs politics". The premise here is that fiscal preferences of voters/taxpayers are not correctly transformed in the political process, and tax differentials reflect bureaucratic and political inefficiencies. Perroni and Scharf (1997a) examine the link between capital tax competition and constitutional choices within a positive model of jurisdiction formation. The model used is that of public service provision, where

jurisdictions are represented by coalitions of consumers with similar tastes, and where the levels of taxation and local public goods provision within jurisdictions are selected by majority voting. Within this setting, interjurisdictional tax competition results in an enlargement of jurisdictional boundaries, and can raise welfare for all members of a jurisdiction even in the absence of intra-jurisdictional transfers.

In summary, there are two potentially important channels through which decentralisation could lesson agency problems, thus reducing the size of government. The first one involves increased political competition and participation. The second involves tax competition. While through these two channels decentralisation will presumably have constraining effects on the size of government, these effects could disappear if the degree of revenue decentralisation is much smaller than that of expenditure decentralisation, ie if there is a large degree of vertical fiscal imbalance. In the first case, because the incentives for the population to monitor the performance of the local public officials closely, will be much greater if the local government expenditures are financed through local taxes, people will be very interested in ensuring that the government spends their money efficiently. They may be less concerned about the efficiency with which government is spending other people's money (eg that which is transferred from the national government). Similarly, the degree of tax competition does not really increase if expenditures are decentralised, but revenues stay concentrated in the hands of the national government, which then shares the taxes with lower-level governments via transfers.

## 2.8 SUMMARY

The analytical treatment of tax competition dates back to Tiebout (1956) who argues that, given certain simplifying assumptions, the decentralised setting of tax rates leads to a Pareto-optimal provision of public services, despite the heterogeneity of preferences in the overall population. Departing from the Tiebout tradition, market failures or imperfections such as fiscal externalities and economies of scale do, however, occur in the provision of public services. Perfect mobility does not exist and there are normally not enough communities to cater for each individual's needs. Preference revelation becomes a problem and local governments can exercise monopoly power. Corrective devices such as Pigouvian tax-subsidy schemes including revenue matching grants and transfers could therefore be used in accordance with the under- or over-provision of public services. Although the need to centralise the redistribution function of government is emphasised, nothing prevents wealthy individuals from segregating themselves from the poor. It

is therefore important that taxes do not distort private decision-making, ie they must promote tax neutrality and subsidiarity but also equity. These objectives can become conflicting and tax competition can be inefficient, quite contrary to the original Tiebout model. It appears that competition specifically for capital or commodities can lead to inefficiently low levels of taxation, even if the tax instruments available to governments extend beyond a source-based (origin-based) capital (commodity) tax. Small regions can, however, gain from tax competition. Size differences should therefore always be taken into account.

Although the Tiebout model produces a form of efficient tax competition, departures from this idealised setting can therefore produce a *wasteful* tax competition. It is believed to be wasteful in the sense that it is distortionary, non-neutral and sub-optimal, and has to be rectified by tax coordination and harmonisation. This conclusion, however, relies on normative or subjective assumptions, one of which implies that tax authorities act as benevolent or responsive planners and pursue well-defined social objectives. This statement is, however, unwarranted without the support of a positive or objective theory of fiscal choices. More recent literature recognises the fact that tax competition can have a positive influence and be efficiency enhancing, especially in cases where there is imperfect competition between firms, and a Leviathan government with commitment and information problems is in power. The difficulty of determining the exact welfare gains or losses from tax competition are, however, recognised and highlighted in most of the literature. This difficulty has led to a continuous debate on the desirability of tax coordination, which will be discussed extensively in chapter 3. Also in the next chapter, issues such as tax assignment rules and tax principles will be re-evaluated in the context of corrective and tax coordination measures.

## **CHAPTER 3**

### **A THEORETICAL EXPOSITION OF TAX COORDINATION**

Without more intensive cooperation among national fiscal authorities, it will become increasingly difficult to tax mobile factors. (Razin & Sadka 1999:7).

#### **3.1 INTRODUCTION**

In the previous chapter the effects of tax competition were investigated. Initially these effects were seen as inefficient, with some exceptions. Recently, however, theorists began arguing for the efficiency and welfare improving properties of tax competition in terms of an imperfect world. Tax competition may therefore influence the location of investment or investment behaviour and patterns of consumption, via the use of both tax rates and specific tax coordination measures.

The usual prescription from analyses of tax competition is that tax policies across jurisdictions should be coordinated to internalise cross-boundary fiscal externalities (tax externalities). These views and others propagated copious academic literature on tax coordination and harmonisation (Keen 1987 & 1989; Turunen-Red & Woodland 1990; de Crombrughe & Tulkens 1990; Dhillon, Perroni & Scharf 1999) and have gained much ground in policy circles. The pursuit of tax coordination and the weight assigned to it, ie full or minimal coordination<sup>28</sup> is increasingly being regarded as a priority within organisations such as the European Commission (EC 1998a) and the Organisation for Economic Cooperation and Development (OECD 1998a).

Classical theorists argue that free trade, ie the propagation of uninterrupted competition among nations, will maximise global welfare. According to Musgrave and Musgrave (1990:70), however, this type of argument cannot be translated into a setting of fiscal competition nationally and subnationally. Strategic behaviour and game-theoretic considerations normally involve relatively small numbers of minor players dominated by a few large players, ie oligopolistic competition. In this case, Tanzi (1995) mentions that governments are sometimes confronted with tensions originating from arbitrage actions, cross-border spillovers, diminished autonomy,

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<sup>28</sup> Full coordination ensures that multi-jurisdictional finance is compatible with the goal of an internationally neutral fiscal system which does not interfere with efficient factor use, meets standards of interjurisdictional and taxpayer equity, and permits each country to pursue its own public sector choices (maintaining national sovereignty). Minimal coordination, however, should prevent one jurisdiction from engaging in discriminatory fiscal practices to the detriment of other jurisdictions (Musgrave & Musgrave 1990:71).

and psychological or political externalities, causing national policies and behavioural patterns ultimately to eventually converge into common, worldwide patterns. As seen in chapter 2, this convergence can be harmful in the sense that national policies and practices are driven to a least common denominator with externalities ignored, in effect a race to the bottom. On the other hand, convergence can also occur with mutually beneficial results, ie survival of the fittest and the best. This chapter addresses the ongoing debate concerning the desirability of tax coordination between different countries (regions) but also within countries (regions).

The first section of this chapter analyses the essential meaning of tax coordination. The second and third sections extend the analysis concerning optimal taxation and the different tax principles discussed in sections 2.3 and 2.4. The discussion concentrates mainly on commodity and capital income taxation on an international level. It ought to provide the necessary clarification on the desirability (or neutrality) of these principles in terms of tax competition and coordination. The last section of the chapter includes a discussion on horizontal but also vertical tax coordination measures available to governments. The main purpose of this section is to provide an understanding of references to these coordination measures in the chapters to follow.

### **3.2 THE MEANING OF TAX COORDINATION**

The analysis of tax coordination has two aspects: Firstly, tax competition can be inefficient, in which case regions will gain from cooperation. If this is true, then, secondly, the form of cooperation becomes important. It may become important to analyse the reasons behind a single government's choice of specific tax instruments, ie the objectives (simplicity, revenue maximisation, neutrality and efficiency), but also within an international context. The question as to whether bargaining solutions necessarily require harmonised tax rates, side payments and identical definitions now develops. Coordination can be costly in itself, and the implementation thereof could warrant the utilisation of other tax sources. This may lead to conflicts about redistribution and harmonised tax rates, and identical definitions of tax bases may interfere with parliamentary and national sovereignty (Musgrave & Musgrave 1990:65; Janeba 1994:14).

Tax coordination involves different levels of agreement between the partners involved. Horizontally, it can be regarded as a measure between government units at the same level. In contrast to vertical coordination, much of horizontal tax coordination is unilateral in the sense that many countries grant credits for income tax paid abroad, whether or not the other countries

reciprocate.

The face of horizontal tax competition and coordination will change as more and more economic integration and internalisation takes place worldwide (Dosser 1967:19-26). Potential free-trade areas such as the Southern African Development Community (SADC), and common markets starting to develop into economic unions such as the European Union (EU), run the possibility of being governed as federated nations. The main instruments used horizontally on a unilateral level are tax credits, tax deductions, tax exemptions (discussed in sec 2.5), tax treaties, and tax harmonisation. While problems relating to these instruments are normally dealt with in an international context, some of them apply to relationships between supra-national, national and lower levels of government within an economic union or federation. As seen in section 2.5, theoretical studies of tax competition and coordination involve cross-fertilisation between the theory of public finance and international trade and thus economic integration as well.

A process of economic integration can be divided into the following distinct and familiar stages:

- (1) A *free-trade area/association (FTA)* removes all tariffs, quotas and other government impediments to trade between member countries, but each member country maintains its own level and form of protection against non-member countries. Such an association requires a host of supplementary regulations such as “anti-trade deflection” rules, ie where goods from outside the group are imported into the lowest-tariff country and are then exported to high-tariff members.
- (2) A *customs union (CU)* also provides for the duty-free movement of goods between members, but in contrast with the free trade association, it establishes a common external tariff.
- (3) A *common market (CM)* satisfies all the requirements of a customs union, but in addition provides for the free movement of factors of production between member countries.
- (4) An *economic union (EU)* not only satisfies the requirements of a common market, but also aims at the full economic integration of all member countries with supra-national authority for joint economic policy-making. It requires a single monetary system, one central bank, a unified fiscal system and a common foreign economic policy. It also requires a positive agreement by all member countries to transfer their economic sovereignty to new supranational institutions. Federations can, in effect, also be regarded as economic unions (Musgrave 1983:17).

- (5) The ultimate objective of an economic union is a full *political union (PU)* of the member countries.

Coordination can be directly linked to economic integration and is seen as one of the steps in a continuum of international convergence. Although international convergence in this case includes more than taxation alone, it can, in the context of the present discussion, be applied specifically to tax convergence. The different steps involved in international convergence should also be seen alongside a process of economic integration from the least to the most integrated scenarios (According to Tanzi 1995):

- (1) *National autonomy* defines a situation in which national governments make decentralised decisions with little or no consultation and no explicit cooperation. This response represents political sovereignty at its strongest and is undiluted by any international management of convergence.
- (2) *Mutual recognition*, like national autonomy, presumes decentralised decisions by national governments and relies on market competition to guide the process of international convergence. It entails exchanges of information and consultations among governments to limit the formation of national regulations. Within the EU, for instance, it entails an acceptance by each member nation of the regulations, standards, and certification procedures of other members.
- (3) Governments may agree on rules that restrict their freedom to set policy or that promote gradual convergence in the structure of policy. As international consultations and monitoring of compliance with such rules become more important, this situation can be described as *monitored decentralisation*.
- (4) Coordination goes further than mutual recognition and monitored decentralisation in acknowledging convergence pressures. It is also more ambitious in promoting *intergovernmental cooperation* to deal with these pressures. Coordination involves jointly designed mutual adjustments of national policies. In clear-cut cases of coordination, bargaining takes place, and governments agree to behave differently to the ways in which they would have behaved without the agreement.
- (5) *Explicit harmonisation*, which requires still higher levels of intergovernmental cooperation, may require agreement on regional or world standards. Explicit harmonisation typically entails still greater departures from decentralisation in decision-making and still further strengthening of international institutions.
- (6) At the opposite end of the spectrum from national autonomy lies *federalist mutual*

*governance*, which implies continuous bargaining and joint, centralised decision-making. For federalist mutual governance to work efficiently strengthened supranational institutions, eg in an economic union, would be required.

A process of economic integration and co-operation can hold distinctive advantages. Asante (1997:31) argues that regional co-operation can promote a complementary and sustained development of countries/regions. This development inter alia can include a reinforcement of the infrastructure, more efficient systems of payment, greater access to credit, more interrelated institutional systems, a greater mutual awareness among economic agents and a growing technical expertise and integration of productive sectors. Other advantages can include economies of large-scale production (efficiency gains) in a growing market; improvement of competition with a growing openness of markets; and international trade advantages which link directly to a growing competitiveness (Brummerhoff 1998:35; Stewart 1994:14).

The advantages of economic integration can only be forthcoming once internal stability has been established within participatory regions/countries. As such tax harmonisation plays a distinctive role in the process of economic integration and tax coordination, and the words “countries” and “regions” are used inter-changeably within the sections that follow. Securing an economic union similar to the process of decentralisation within a federal system means that five components become relevant: preservation of the common market; tax harmonisation; transfers and social insurance; intergovernmental transfers; and regional fiscal equity. Each one of these components will be addressed in some way within this and the following chapters.

### **3.2.1 Common markets**

Fiscal harmonisation and thus tax harmonisation are normally more important in a common market than in a free-trade area, for several obvious reasons: First, in a common market no customs tariffs or export taxes are imposed when goods move from one member country to another, while in a free-trade area only goods that originate within that area can cross intra-area borders without paying tariffs; goods that originate outside the free trade area and that enter the area by way of a low-tariff country will be subject to the payment of the difference in tariff when they move on to a high-tariff country within the area. The low-tariff country would otherwise become the sole importer for the whole area, and the high tariffs of the other countries would become ineffective. This “anti-trade deflection” provision is not needed in a common market



because member countries of a common market ought to agree right at the beginning on a uniform system of tariffs or commodity taxes on all imports or exports in the market. This greater freedom of internal trade in the common market ought to offer greater rewards to tax harmonisation; and more can be lost in terms of allocative efficiency through a failure to align public finance systems.

Second, a common market seeks to increase the mobility of factors of production more than does a free-trade area. This enhanced mobility again increases both the rewards to come from harmonisation of the internal fiscal systems and the penalties for failure to harmonise. It also seems likely that a free-trade area is only a holding operation, designed to help its members decide whether they wish to bind themselves more closely in a common market, or join an existing common market. The possibility therefore does exist that the free-trade area could be ineffective or short-lived (Shibata 1967:457).

Developing countries combining into a common market will normally discover that economic growth is already being fostered by a number of fiscal measures, but that the pattern of such measures differs widely among countries involved. The heterogeneity will persist while commitments are being honoured, but as they expire the opportunity for uniformity arises. Without some sort of uniformity, competition for business may drive tax rates down and tax exemptions up beyond what any country desires (Shoup 1967). The competition will be exceptionally intense when the common market has eliminated tariffs among member countries, so that each country can promise a wider market to foreign capital than before. The agreement need not provide complete uniformity. Some of the less developed members may be permitted to offer greater fiscal incentives than the others, but the rules have to be defined clearly. The fiscal incentives are usually reserved for manufacturing concerns, and are occasionally given to specified extractive, timber, fishing, agriculture and service industries, and low-cost housing (Gillim Hamilton 1967:488). A uniform policy that supports specific countries' objectives but also the mutual objective of the common market or region, should therefore be developed as regards fiscal incentives.

### **3.2.2 Tax harmonisation**

When tax harmonisation is achieved through a binding agreement or contract among member countries it may be termed a "tax union", which in principle is also part of an economic union

(Dosser 1967:10). Shibata (1967:190) defines a tax union as an international agreement among a group of countries concerning internal taxes, by which the participating countries agree to take (a series of) simultaneous action(s) involving a re-orientation of the geographical discrimination prescribed in their internal tax structure. "Reorientation of geographical discrimination" refers to the modification of taxes imposed on the basis of geographical differences in the location of economic activity, such as the country of consumption, country of residence, country of payment and the like, so that they apply only to a group (or non-group) of countries.

The concept of non-discrimination in terms of nonresidents is an accepted norm, also within federations' constitutions worldwide. A tax union should be differentiated from tax harmonisation or tax coordination, for the former involves the surrender of a substantial part of individual member *sovereignty* on tax matter, particularly in the area of tax treatment of non-tax-union members, while the latter generally allows individual countries to retain substantial *autonomy* in such matter. In general, tax harmonisation refers to the standardisation or uniformity of tax rates, tax rules and tax definitions (tax bases) throughout a number of regions. Tax harmonisation is therefore only one aspect of fiscal harmonisation. It covers the full spectrum from single tax harmonisation to complete uniformity of commodity and capital income taxes, as well as export taxes<sup>29</sup>.

### 3.3 COMMODITY TAXATION

This section attempts to summarise the most important issues discussed in section 2.4, and to extend it in a direction that will clarify the use of specific principles in commodity taxation in specific situations. As observed in section 2.4, the discussion mainly concerns VAT because of the latter's increasing importance in world economies today.

#### 3.3.1 The application of the origin and the destination principles

Under ideal conditions, consumers cannot move across the border to purchase goods where the after-tax price of a commodity is lower, and producers cannot move production facilities to the country where the after-tax price is higher. Under these circumstances a switch between the origin (production tax) and destination (consumption tax) principle will have no effect.

<sup>29</sup> See Gillim Hamilton (1967:509-512) for a discussion of export taxes. Export taxes are generally regarded as an impediment to a region's competitiveness. Despite this, some countries (notably South Africa) still implement this kind of tax with the effect of harming domestic

Determining the desirability of the destination and the origin principles entails a choice between production and consumption inefficiencies (Haufler 1993; De Bonis 1997). As long as the commodity tax is uniform on all goods within a country, production and consumption inefficiencies do not arise where tradable goods are concerned. Put differently, if all goods were traded, neither tax principles would produce inefficiencies, so long as a uniform tax rate were applied within each region, even if tax rates differed across regions. In a monetary economy, price level or exchange rate adjustments alone would be enough to compensate for a switch between principles.

Uniform taxation is not always desirable and feasible, eg VAT that is levied differently on different types of goods. To minimise inefficiency (ie the excess burden), different tax rates should be applied to different commodities. This, the inverse elasticity or Ramsey rule, can also be applied to different types of capital (real and financial investment). Apart from this, it is believed that cross-border mobility of consumers is far less important than mobility of production facilities (De Bonis 1997). The origin principle violates tax neutrality in that it distorts production and should thus be discarded<sup>30</sup>.

The destination principle is seen as neutralising the effect of international differences in tax rates on international trade. This sheds light on why the destination principle is usually given preference in international practice. Historically, the destination principle prevailed before the first international agreements on the taxation of commodity trade were drafted (Haufler 1993). The destination principle and thus zero-rating exports are in line with Article III and Article XVI of the General Agreement on Tariffs and Trade (GATT), since 1998 better known as the World Trade Organisation (WTO). The rebate of domestic taxes for an exported product is explicitly excluded from the definition of (prohibited) export subsidies. In this case, exports are zero-rated because this directly affects the competitiveness of a region's products, while imports are taxed (sec 2.4). Although tax deductions (subtraction method) can be used, tax credits (invoice method) are mostly used to determine the importers' tax liability (sec 2.5).

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entrepreneurship whilst encouraging imports from other countries.

30 If  $t_{go}(t_{go}^*)$  is the rate applied to goods produced in the home (host) region, free trade will imply that  $p(1 + t_{go}) = p^*(1 + t_{go}^*)$  in both regions. Consumers will maximise their utility by equating the relative consumer price between any two tradable goods with the marginal rate of substitution between them. These marginal rates of substitution are equated across countries and the allocation of world consumption is efficient. The origin principle ensures that producers are indifferent to producing for the home or the host market. If tax rates differ across countries, however, the relative producer prices will differ ( $t_{go} \neq t_{go}^*$ ), implying that  $p \neq p^*$  and world production is inefficient. The converse situation applies for the destination principle and imports are taxed at the same rate. The after price equalisation conditions for an individual consuming an identical good supplied at home at constant costs will be,  $p(1 + t_{gd}) = p^*(1 + t_{gd})$ , and abroad  $p^*(1 + t_{gd}^*) = p(1 + t_{gd}^*)$ . This implies that  $p = p^*$ , and producers equate this price to the marginal rate of transformation between any two tradable commodities. Tax rates are the same in all regions and world production efficiency is obtained (refer to sec 2.4).

The destination principle, however, entails more administrative difficulties because information is required on elasticities and patterns of complements and substitutes (imports). Such information is not always readily available. In addition, the abolition of border controls in common markets for example, destroys the neutrality of the destination principle (invoice method) and renders it unsustainable if no special provisions are made to replace border controls. The importing rather than the exporting country gives tax credits within a common market or economic union, which means that revenues are distributed unevenly. Apart from this, cross-border effects such as direct consumer purchases make the destination principle ineffective and elements of the origin principle prevail. It should, however, be pointed out that while border controls for VAT do not interfere greatly with international trade, which is stopped at the border for other reasons, it is a serious impediment to the movement of trade within a country or common market. This latter argument is likely to be even more stringent on the movement of trade if an origin-based VAT with non-uniform rates is imposed. Under the origin principle, tax avoided at the border cannot be recouped.

The elimination of border controls is also one of the reasons why fiscal harmonisation is more important in a common market than in a free-trade area. When border controls in a common market are abolished so far as customs are concerned the way is opened for complete elimination of border controls. Internal tax systems, however, have to be revamped so that no rebates of commodity taxes are given upon export of goods from one member country to another, and no compensating import tax is levied on imports from one member country to another. Psychologically, the complete absence of border controls can create a spirit of unity that can extend to political unity. In a free-trade area, border controls on intra-area trade must remain to enforce “anti-trade-deflection” rules and to levy pure revenue duties on imports where the importing country produces neither those goods nor close substitutes (Shibata 1967:455-57).

### **3.3.2 Tax harmonisation**

Tax harmonisation can provide the solution to the above-mentioned problems associated with the abolition of border controls. As seen in section 2.4, the loss of economic efficiency due to VAT is likely to be minimised when *uniform rates or only three or four rates* are applied to the broadest possible base. This therefore includes a tax base harmonisation. When the rates lie in a band sufficiently narrow to make gains from tax arbitrage lower than transportation and transaction costs, the origin and destination principles will roughly coincide and the incentives

for cross-border purchases ought to disappear. This, however, could interfere with a country's right to levy taxes in accordance with its needs. Revenue losses in high-tax countries and political opposition to tax increases in low-tax countries could occur. In this case, it may become necessary to explore hybrid systems, such as the restricted origin principle.

### 3.3.2.1 The restricted origin principle

Under this system, trade within a common market or economic union is taxed according to the origin principle and trade with the rest of the world according to the destination principle. The restricted origin principle bases all trade within an economic or tax union on pre-tax prices, while applying border tax adjustments to trade with third countries. This means that the tax rate of the origin country applies to intermediate and final goods that are traded, and revenues accrue to the exporting country. All trade between union members and the rest of the world, however, is taxed according to the destination principle, ie the tax rate of the destination country applies and revenues accrue to the *importing country*. The tax split thus occurs between the union's internal and external trade whereas intra-union purchases by final consumers and purchases by registered commodity tax, eg VAT traders, are taxed in the same way. This type of system would ensure subsidiarity within the union and tax neutrality towards the rest of the world.

As mentioned in section 2.2, subsidiarity implies administrative tax independence in favour of decentralisation and intervention should only occur in the presence of cross-border externalities or economies of scale. Further, as pointed out in section 2.3, neutrality entails that taxes should be imposed in such a way that economic processes continue to operate uninterrupted. Neutrality therefore generally requires a substantial degree of coordination and centralisation. With the restricted destination principle, tax neutrality is ensured but subsidiarity will be violated. The choice between the two principles depends essentially on the objectives pursued in an economic union but also involve administrative issues such as tax credits and deductions, ie the best possible way to determine the tax liability.

Tax credits (invoice method with or without a clearing mechanism) or deduction (subtraction method) can be used to avoid double taxation. With the latter an importing firm would not be able to obtain a refund for the foreign VAT paid, but would instead be able to deduct the purchase price from its taxable sales revenues, ie shifting the process into firm's books. This could prevent revenue losses from tax arbitrage and welfare losses (Musgrave 1967; Sinn 1990a).

The subtraction method is, however, not unilaterally utilised and it is uncertain whether some destination countries, notably the US, would replace credits with deductions. If tax differentials occur under the origin or restricted origin principle, two cases can be distinguished depending on whether the transshipment of goods (trade deflection) is allowed or prohibited.

Two cases of trade deflection can develop within a tax union: Firstly, consumers in the high-tax union country channel their imports from the rest of the world through the low-tax union partner. In this case, there is an incentive to locate production in the low-tax jurisdiction and to use “creative accounting” to have value added attributed to low-tax jurisdictions. Secondly, commodity exports from the low-tax union country to the rest of the world are diverted through the high-tax member state to take advantage of the higher tax rebate. Trade will be fully deflected with zero transportation costs, altering the pre-tax pattern of trade flows. World relative prices are not distorted but the high-tax country within the tax union loses all tax revenue to its low-tax union partner. Trade deflection becomes the adjustment mechanism which prevents Pareto-type distortions, at the expense of inter-country income transfers, however (Shibata 1967:212-224).

In the alternative to the aforementioned, is where the transshipment of goods (trade deflection) is not allowed and it is assumed that the pre-tax pattern of trade is not changed by the introduction of taxes. In this setting, international trade is distorted unless tax rates are equalised between the member states of a tax union (Berglas 1981:382). Johnson and Krauss (1970:600) argue that the introduction of a common external tax avoids allocative distortions even in the presence of intra-union tax differentials. The common external tax, however, does not re-establish autonomy in tax policy matters for the member states of the tax union. In order to comply with the General Agreement on Tariffs and Trade (GATT), all union members would have to apply the tax rate of the lowest-tax state for their external trade so that the tax rate chosen in this country would affect VAT revenues in all member states. These arguments will become clearer as real life situations are investigated in the next two chapters.

Uniform taxation or tax rate harmonisation can be utilised to ensure tax neutrality under the restricted origin principle. This can also entail an agreement on minimum rates for excises and VAT to prevent an infinite downward spiraling of tax rates within a common market. If a system of income and expenditure is already in place for the poor or ageing population (social insurance), the argument for uniformity is strengthened. This also links to the fact that decisions

on commodity or indirect taxation also affect capital income or direct taxation. The degree of tax uniformity will therefore depend on the ultimate goal of the common market or economic union that finally affects countries' sovereignty.

It seems from the above discussion that the application of both the destination and origin principles involve inefficiencies that can be improved through a process of tax base and tax rate harmonisation. The next section must be seen as an interchangeable part of the present discussion, ie the origin is interchangeable with the source principle, and the destination with the residence principle.

### 3.4 CAPITAL INCOME TAXATION

This section attempts to summarise the essential meaning of the different tax principles as well as their desirability, although these are not always clear-cut. These principles are investigated as part of a broader discussion regarding the influence of taxation and investment decisions, and various other factors, such as debt versus equity finance, tax base harmonisation, tax incentives and tax treaties, have to be seen as part of the discussion on tax competition and coordination.

#### 3.4.1 The source and residence principle

In section 2.3.2.1, it is argued that the residence principle is more efficient than the source principle, even in the presence of different tax rates or tax competition<sup>31</sup>. This is in line with the idea that a country can maximise its revenue by taxing its residents on the basis of their worldwide income with an application of interpersonal equity via progressive taxation (Musgrave & Musgrave 1990). The residence principle further allows capital export neutrality (CEN)<sup>32</sup> that implies that the tax system does not affect the choice between investing at home or abroad, ie non-distortionary. Both of these objectives, revenue maximisation and CEN, are also pursued by the double-taxation relief treaty (OECD 1977). This treaty calls for the primary taxation of portfolio income by residence countries of creditors and shareholders. It therefore

31 The source principle can be summarised as follows:  $(1 - t) \text{MPC} = (1 - t^*) \text{MPC}^*$ , where MPC and MPC\* denote the gross return on investment (marginal product of capital) in a home and host region (indicated by an asterisk). This means that arbitrage by capital owners equates the net return across countries ( $r = r^*$ ), and hence the marginal rate of substitution between savings on the one hand, and labour supply or consumption on the other. Savings are efficiently allocated from a worldwide point of view. The tax rates on capital income in different regions, however, vary ( $t \neq t^*$ ) and this will lead to unequal MPCs. World capital stock is thus inefficiently allocated. The reverse holds for the residence principle.

32 Export neutrality ensures that the investor pays the same total income tax (domestic plus foreign), whether he receives the given investment income from foreign or from domestic sources (ie apart from different tax rates). Foreign and domestic activities bear the same amount of tax on their income.

encourages source countries to levy low withholding taxes on interest and dividends paid to foreigners. Taxpayers with a high tax bill on their worldwide income can, however, migrate and domestic firms can seek an alternative “tax address” through a tax haven.

Vogel (1990:166) supports exclusive taxation by the source state, ie in general preference should, in terms of efficiency and equity, be given to the source or territorial principle. This should at least apply to corporate profits (active income) and labour. A variety of state-induced circumstances as well as administrative and other infrastructural variables therefore operate to make CEN non-existent (efficiency). This is explained by the argument that residence countries typically cannot enforce compliance in filling the correct return on foreign-source income, especially in the case of interest or passive income<sup>33</sup>. In this case size differences between countries have to be taken into account.

Razin and Sadka (1990:163) argue that there are no gains from tax harmonisation among those competing countries, which constitute just a fraction of the world economy, regardless of whether or not they are coordinated with the rest of the world. A situation where there is some coordination is, however, still preferable but with the assumption that a government can effectively tax foreign-source income. In this regard, the residence principle can only be effectively implemented if governments cooperate in the exchange of information. If there is no coordination with the rest of the world, tax competition can lead to an extreme situation where no tax whatsoever is imposed on capital income from any source. The tax burden will then fall on the internationally immobile factors (unskilled labour, land, etc.). Blumenthal and Slemrod (1995) provide empirical evidence, which suggests that foreign-source income compliance costs are disproportionately high relative to their role in the activities of large US multinationals. Source countries do not cooperate either, eg low-tax countries or tax havens, and profits are retained. Tax neutrality can only be achieved in terms of domestic income but foreign-source income remains untaxed.

In similar vein, it is argued that the source principle is inefficient and that uniform tax rates are necessary. If all countries (regions) apply the source principle on capital income, the positive

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33 This refers to the problem that the tax on income of subsidiaries is not taxed or deferred until it is repatriated. Such profits can go untaxed for an indefinite duration. Vogel (1990) argues that the term “non-taxation” instead of “indefinite deferral” is more suitable because of its objectivity without any value-judgements. Increasing attention has, however, been paid to limiting the benefits of the deferral provision for passive income. It is assumed under subpart F legislation in the US that passive investment income accumulated abroad has been fully repatriated.



externality that their own taxes provide to other regions (or the rest of the world), is ignored. Lowering taxes would become a “beggar-thy-neighbour” policy. Different rates on capital income in different countries (regions) provide incentives that affect the allocation of investments unless tax rates are harmonised by, for example, agreeing on a common withholding tax rate<sup>34</sup>. Low nominal tax rates induce the shifting of the tax base but low effective rates encourage the shifting of real investment. The equilibrium outcome of the Cournot-Nash game is under-taxation of capital, which increases in severity the larger the elasticity of capital outflows to the changes in the tax rate. Governments’ ability to tax capital, especially in capital-importing countries, becomes restricted and the burden ultimately falls on immobile factors of production, which in itself provides limited tax revenue (Frenkel, Razin & Sadka 1991:213). This borders on the phenomenon of underprovision of local public services and “a race to the bottom” as discussed in section 2.3.

Tax competition provides incentives to some countries, and especially to small countries, to become low-tax countries or even tax havens. In this respect, tax coordination necessarily includes the effects or impact of tax havens. Taxation relief can be categorised as follows (Ginsberg 1991:15); see also section 4.4:

- (1) Tax exemption (tax paradises or “no tax” havens such as Anguilla, the Bahamas, Bahrain, Bermuda, the Cayman Islands, Cook Islands, Djibouti, Turks and Caicos, and Vanuatu)
- (2) Low taxation (can be in the form of fixed rates established by the specific government or in combination with reduced or exempted taxes resulting from treaties to avoid double taxation). These are known as tax shelters, eg in Hong Kong, Liberia, Panama, the Philippines and Venezuela
- (3) Special incentive privileges to off shore companies and qualified holding companies, eg Luxembourg, the Netherlands, the Netherlands Antilles, and Singapore, The Isle of Man and Monaco
- (4) Tax exemption for manufacturing and processing of exports, eg Ireland
- (5) International corporation tax reduction, for instance, investment corporations considered as privileged off shore financial companies, such as in Antigua, Barbados, Grenada and Jamaica.

34 A withholding tax refers to taxes on earnings, interest or dividend payments deducted at source. The tax is designed to simplify the collection of tax and to ensure that tax is not evaded. By taxing dividends due for repatriation, it is hoped that foreign-owned companies will be encouraged to invest in the country where their subsidiaries are located. In the taxation of portfolio capital, governments are often constrained in monitoring and taxing this income due to bank secrecy laws and limited or no information from foreign governments.

The main function of tax havens is the avoidance of current and future taxes and exchange controls. Further functions involve postponing the imposition of taxes, thus permitting the more rapid development and consolidation of an undertaking. It also often provides an effective shield against sanctions and against the dangers of confiscation, nationalisation, and other types of expropriation. The exploitation of tax havens has become a globally debated issue. The latest report of the OECD (1998), and the EU Code of Conduct (1997), which also includes “harmful preferential tax regimes” lends credence to this claim. The report in question, as well as tax havens, will be discussed in detail in chapter 4.

The tax treatment of domestic and foreign investment income is thus important when considering tax principles. The source principle is readily accepted, both in tax treaties and in practice, in the taxation of corporate profits (foreign direct investment). The idea is that the source country creates the economic conditions under which direct (real) investment can flourish (Bovenberg & Cnossen 1997). Moreover, capital-importing countries, which are normally the poorer countries and are dependent on the attraction of foreign direct investment, need to apply an equal tax treatment of all investment income (see United Nations Model Treaty). The source principle should therefore be applied because it promotes capital-import neutrality (CIN)<sup>35</sup>. This also links to an easier tax administration and enforcement because the taxable income originates in the jurisdiction collecting the tax. The objectives of both neutrality and subsidiarity could therefore be achieved if rates were uniformly applied. Difficulties arise, however, in determining proper arm’s length prices (transfer pricing) for cross-border transactions of multinationals and in the allocation of joint overhead costs for these firms.

In summary, under ideal conditions (perfect capital mobility), the residence principle equalises before-tax rates of return, ie capital costs (interest rates without any taxation) are the same in different countries despite different capital income tax rates. This implies an efficient allocation of capital. By contrast, the source principle tends to equalise the after-tax rates of return of savers residing in different jurisdictions. It is thus an investment tax that distorts investment decisions.

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<sup>35</sup> Import neutrality ensures that capital originating in various countries competes on equal terms in the capital market of any country. The taxes paid by a foreign corporation operating in a jurisdiction are thus the same as those paid by resident corporations (uniform taxes) and a company is exempted from tax on its foreign income in a specific country.

### 3.4.1.1 Taxation and investment decisions

As pointed out in section 2.3.2.1, business firms are likely to be more sensitive to differences in capital costs than savers to differences in net returns. The residence principle (ie CEN) thus seems a more important efficiency objective to pursue than the source principle. These arguments, however, assume ideal conditions with perfect competition and no externalities. Other factors distort investment decisions even further<sup>36</sup>.

In simplified terms, the opportunity cost of an investment project involves the consumption sacrificed by a person saving money. The saver incurs this cost because of a future expectation of return on the investment. Hall and Jorgenson (1967) identify taxes as one of the components that influence the user cost of capital, assuming that firms are unable to shift their taxes onto consumers. In section 2.3.1, the cost of capital ( $c$ ) depends on the after-tax or net return to capital ( $r$ ) and the taxation ( $t$ ), ie  $(r + t)$ . However, there is more to this net return and the way in which taxes affect the *user cost*, and hence investment, depends on the specifics of *tax legislation*. Since firms do not pay the full statutory corporate tax rate, owing to other provisions in tax legislation, the user cost of capital should instead include the *effective rate of tax*. The effect of taxation is to drive a wedge between the pre-tax return on investment ( $p$ ) and after-tax rates of return on savings ( $s$ ). The market rate of return ( $m$ ) is also involved. This rate of return represents the price of funds on capital markets and provides the link between a firm carrying out the investment and the saver providing the finance. The firm pays this rate to the saver after it has met its corporate tax liability but before the saver has met any personal tax liabilities.

The payouts may be in the form of debt or equity. In the case of debt,  $m$  corresponds to the real interest rate. In the case of equity finance, it corresponds to the real return on equity (including retained earnings) before personal taxes. The pre-tax return on investment ( $p$ ) is thus the minimum rate of return that a firm must earn before taxes in order to be able to meet any tax liabilities and  $m$ . The relation between  $p$  and  $m$  depends on macro-economic variables but also on tax provisions such as depreciation allowances, investment grants, and the deductibility of interest expenses. The pre-tax return or the cost of capital ( $c$ ) function, can thus be written as  $c(m) = p$ , and the after-tax return function as  $d(m) = s$ . The after-tax return is influenced by the inflation rate and the personal tax treatment of the saver and also depends on whether the saver

<sup>36</sup> Various authors such as Gordon (1986); Sinn (1987); Alworth (1988); Bovenberg (1988); Giovannini (1988); Slemrod (1988); Razin and Sadka (1990) provide an evaluation of tax distortions. Tax wedges are of particular importance here (Bovenberg et al 1990:288).

provides funds directly or through an intermediary, and on whether the funds are in the form of debt or equity. The total tax wedge ( $t$ ) can thus be defined as the difference between the remuneration of capital before taxes and the compensation after taxes, available to holders of financial claims on the firm. The wedge can be written as,  $t = p - s$ , and brings about distortions.

Neoclassical theorists conclude that the firm employs capital up to the point where its marginal revenue product (MRP) equals its marginal cost (MC). In the absence of taxes,  $MRP = \text{price of capital} \times [\text{interest rate} - \text{inflation rate} + \text{rate of depreciation}]$ . As a result, the firm must earn  $1/(1-t)$  times its pre-tax return ( $p$ ) to keep the after-tax earnings ( $s$ ), in which the investors are interested, unchanged. King and Fullerton (1984) propose a highly versatile methodology (in a single-country setting) to calculate the impact of complicated tax provisions on the cost of capital, yielding a marginal effective tax rate (METR). The concept of effective tax rates is developed. This includes the effects of the definition of the tax base, eg deductibility of interest, depreciation allowances and special investment incentives as well as inflation effects. It also considers personal income taxes (PITs). The model has since been extended to include cross-border activity (Devereux & Pearson 1990; see also section 4.4).

The effective tax rate measures the difference between the return on investment before and after corporate tax (CT) when an alternative investment is available, ie the marginal effective tax rate (METR). Differently interpreted, it means that the METR is equal to the difference between the pre-tax rate of return ( $p$ ) and after-tax rate of return ( $s$ ). Tax competition therefore not only entails a decision between statutory tax rates, but also the use of effective tax rates. A given CT wedge can impose larger national welfare losses in an open economy than in a closed economy, owing to its greater effect on investment. The same holds for a PIT wedge affecting savings. A country can, for instance, provide an investment incentive corresponding to a negative CT wedge. Differential investment incentives (tax incentives) can distort the international playing field and, if externalities are absent, harm international welfare.

Effective tax rates do not provide all the answers, because there may be substantial differences between countries. Effective tax rates depend on the type of investor such as corporations, the form of investment such as machinery, and the form of finance such as a new share issue and/or retained earnings. Moreover, when it is implied that one country's capital income taxes are too high or too low relative to another, a broader analysis is needed. This becomes clear from the OECD study (1991) in which effective tax rates were calculated for domestic and multi-national

or transnational investment in OECD member countries. No conclusion could, however, be reached as to which country had the highest tax burden. Average effective tax rates can also be utilised as a measurement and can be approximated by the ratios of countries' aggregate corporate taxes to their GDPs. This rate can be calculated as current taxes on income and wealth of corporations as a percentage of the net operating surplus of these corporations (ch 5). Empirical studies tend to be rather inconclusive (sec 4.4) concerning the influence of taxation and this again emphasises the need for reconciliation between empirical and theoretical work. Such reconciliation is the main aim of this thesis.

Cnossen (1998), for instance, argues that international spillover effects of domestic decisions regarding capital income taxation, and thus the need for coordination, depend ultimately on the definition of the *tax base* and thus the way debt and equity income are allocated across different taxing jurisdictions. It has to be emphasised that specific corporate tax systems, the operation of double taxation relief, as well as debt and equity finance are unique in different countries (chs 4 and 5) and have to be investigated as such. The purpose of this overview is to highlight the most common problems and solutions suggested. The classical and full integration systems that describe two extremes, with other systems in between, are therefore at the forefront of the discussion. Although there are various discussions concerning the topic, detailed discussions can be found in Head (1997) and Cnossen (1998).

With the unmodified classical system, corporate income is taxed twice: first as corporate tax (CT) and then also as personal income when distributed as dividends, ie double taxation of dividends is effective. No relief is given at corporate or shareholder level. Relief can, however, be given at corporate level either by reducing the rate of tax on distributed profits (split rate method) or by reducing the base to which the rate is applied (dividend deduction method). The zero-rate method is one in which no corporate tax at all is charged on distributed profits. If shareholder relief is given but has no bearing on the amount of corporate tax paid, a modified classical system is applicable.

An imputation system is used to refer exclusively to systems where there is a direct link between tax credit given to the shareholder in respect of income tax paid on dividends received and corporate tax paid by the distributing corporation, full imputation referring to the case where all tax on distributed profits is taken into account in the shareholder's credit, and partial imputation where only some of it is. Imputation is also sometimes referred to as tax credit on personal

income tax (PIT) for shareholders.

With a full integration system (Schanz-Haig-Simons definitions utilised), the corporation is seen as a conduit for all corporate income to the shareholders. All corporate income (retained or distributed) is taxed in full in the hands of the shareholders, on the basis of the number of shares owned, at their marginal income tax rates. The corporate tax serves only as a withholding tax, which is credited in full at shareholder level. In this case, shareholder relief is strictly linked to the corporate tax paid on relevant distributions. Shareholders also have the possibility of refunds from the government if their tax credit exceeds their income-tax liabilities. The next section provides an overview of how the classical and full integration tax systems can influence decisions concerning debt and equity.

#### **3.4.1.2 Debt versus equity**

The marginal source of equity finance (ie retained profits or new equity) determines whether double taxation will be applicable on profit distributions. If firms finance their marginal investments through profit retention rather than new shares, dividends that would otherwise be available for distribution, have to be reduced. The role of dividends is therefore important. In this case, two opposing views have emerged in the literature: the “traditional view” and the “new view”.

On the one hand, the traditional view argues that dividends offer non-fiscal advantages. Dividends serve as a signaling device to shareholders, eg that all is well with the corporation, or that financial discretion may be limited. Corporations equalise tax disadvantages and non-tax advantages of profit distributions at the margin. A new investment will therefore be financed partly by issuing new shares, because dividends cannot be lowered without cost. Dividend income in comparison to retained profits also carries a higher total tax burden, whereas retained profits discourage new investment and distort the dividend-payout decision. Whichever financial decision is taken, a system of full integration should rather be implemented to specifically avoid the double taxation of dividend income. Most empirical studies support the latter statement and therefore support the traditional view (Poterba 1987; Zodrow 1991).

On the other hand, the new view strongly denies the existence of non-tax advantages associated with profit distributions. A higher tax on dividend income should cause corporations to prefer

profit retentions to new share issues as the marginal source of finance. Profit retention enables shareholders to enjoy the return on new investment in the form of tax-preferred capital gains. This means a capitalised saving in terms of personal income tax (PIT) on dividend income because of no profit distributions. A double taxation of dividends (classical system) should rather be implemented because it is non-distortionary on investment decisions. The latter applies if the corporation generates sufficient profits to finance marginal investments through retained profits, and the tax rate on dividends is expected to remain constant in the future. There is a contradiction in that the market value of corporate assets exceeds existing share values, although this is not always the case. From this discussion, two options exist: (a) the classical approach as supported by the new view, or (b) the full integration approach as supported by the traditional view<sup>37</sup>.

In the first instance, a classical approach, a completely non-integrated or unmodified classical system in which corporate-source equity is taxed at both the corporate and shareholder level can be implemented. Debt finance is favoured over equity, the issue of new equity is discouraged and the activities of the corporate sector are discriminated against. The tax-favoured status of debt discriminates against small and young corporations, which face difficulties in attracting debt because credit ratings are not yet well established. Mainly nonliquid assets against which it is difficult to borrow are owned, or insufficient taxable profits are generated. A country can, however, claim that it has a right to impose a withholding tax on dividends flowing abroad, since it will never be able to reach the shareholder directly, as would be the case with a shareholder who is a resident. Only in this way can it apply double taxation with the knowledge that the home country will allow a tax credit against the withholding tax.

The growing importance of internationalisation and liberation of capital markets implies that the tax system increasingly favours debt over retentions because it increases the possibility of evading or avoiding the PIT on interest income. Opportunities for tax arbitrage involving debt finance is in effect created through disappearing capital controls and internationalisation. These opportunities increase because of continued financial innovation and new financial instruments that make debt and equity close substitutes. Lightly taxed assets can, for instance, be financed

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37 By contrast, Miller and Modigliani (1958, 1961 & 1963) argue that corporate financial policies, including payout policy and debt-equity ratios, cannot affect the market value of shares and are accordingly a matter of no policy concern. The basic observation is that the impact of changes in financial policy at the corporate level can always be offset by adjustment in asset portfolios at the personal level. Adjustments in payout policy or debt/equity ratios in response to the financial non-neutralities of a classical system of corporate taxation cannot be characterised as distortions and may be viewed instead as costless methods of "do-it-yourself integration".

through loans (the interest of which is deductible against taxable income in countries with high tax rates) and capital income is therefore subsidised. Continued pressure therefore prevails on the distinction between debt and equity, and this makes economies more vulnerable in recession periods when more bankruptcies occur. Alworth (1999:187-221) provides a detailed discussion on several interrelated developments, viz: the growth of international transactions involving financial intermediaries that enjoy special tax status; the reasons for the contraction of source-based withholding taxes; the expansion of business in derivative financial instruments which render traditional tax categories irrelevant and require a shift in the focus on the definition of income; and the enforcement of the residence principle.

In the second instance, the full integration approach, relief from double taxation of dividends can be provided. This ameliorates some of the problems by providing shareholders with credits for corporate income taxes imputed to their dividends. This refers to a variant of the full integration system, viz. imputation and partial imputation systems. The corporation can, therefore, deduct dividends paid to stockholders just as it deducts interest payments to bondholders. Corporate tax is still maintained as a separate entity, but imputation credits are not commonly provided to shareholders who invest in companies headquartered in other countries, by either the source or residence country. The imputation method does not generally allow shareholder credits on dividends received by non-profit organisations. The tax-exempt status of institutional investors, such as pension funds, therefore facilitates the preferential treatment of the return on debt. Interest income accruing to pension funds is typically not taxed, nor is dividend income, but such income is taxed at source under a CT. This also affects these investors' portfolio choices and thereby the ownership structure of firms. Bonds are normally preferred as the price of shares that yield much of their return in the form of untaxed capital gains, are bid up by taxable investors. Imputation systems therefore discourage cross-border equity investments.

#### **3.4.1.3 Interest and dividend income**

Both the systems, classical and full integration systems, raise concerns regarding the effective exemption of interest income. As already pointed out, international flows of interest are exempt from tax in the source country as a matter of policy (OECD 1977). These countries are sometimes forced to levy low tax rates on dividends and interest incomes of their citizens. To prevent capital flight nonresidents' income stays untaxed in residence countries. Although retained earnings are effectively taxed at source, cross-border interest payments are not always



reported and are left untaxed in the residence country because of administrative difficulties. Frenkel, Razin and Sadka (1991:186) provide estimates of capital flight induced by a combination of failure to tax in source countries and the difficulty of taxing in residence countries.

The classical system that in reality assumes taxation of interest, and the imputation system that is supposed to provide full relief of dividends, cause a general movement towards debt financing (interest on debt, not equity, is exempt from taxation). Excessive international flows of debt capital are forthcoming. Debt funds invested abroad are commonly subject to lower taxes than those invested at home. Whichever system is applied, the argument holds that double taxation of dividends cannot be avoided and is distortionary and harmful to new business ventures that rely on new share issues to provide equity needs. The discrimination of new equity occurs under both the classical and imputation systems, and contributes to the concentration of market power by discouraging the entry of new firms. Altshuler and Mintz (1995:29) argue that specifically US corporations (classical system) face a tax disadvantage when undertaking new investments since some of the debt costs through interest-allocation rules, are not deductible. This tax advantage is especially detrimental to small, growing firms which ought to provide an impetus to technological innovation. One way of solving this is to tax only existing equity and not new equity. This can, however, be administratively burdensome and costly (Sinn, 1990b). Viable solutions would have to be found to alleviate these problems. Alternative capital income/corporate tax systems (tax base reform) would have to be explored but at the same time tax treaties would have to be re-negotiated to make provision for these.

#### **3.4.1.4 Tax base harmonisation (reform)**

A common feature of, but also one of the main reasons for, treaties, is cooperation in tax administration. Tanzi (1995:89), however, argues that this cooperation would not automatically arise in the case of interest income. This links to the fact that domestic tax on interest income has elements of source tax and tends to induce capital flight, as argued in section 2.3.2.1. In this case, the application of the source principle would be the easiest solution but would be unsupported by treaties in developed regions (OECD 1977). A creditable minimum withholding tax on interest and perhaps dividends in the source country would therefore have to suffice as a solution to tax evasion. This could facilitate an exchange of information to verify claims for

credits against home country taxes<sup>38</sup>. The minimum withholding tax, however, could result in further discriminations between countries and reverse tax competition if not levied appropriately, just as in the case of a normal source principle. In this case, Sinn (1990b) argues that tax base harmonisation is essential before tax rate harmonisation. Cnossen (1998:233-241) gives a full account of all tax bases available in capital income taxation. The first set of choices, viz. full integration that entails a true economic depreciation, would be the ideal option under the current residence principle. Actual deviations from true economic depreciation include inter alia investment incentives and accelerated depreciation

The argument that the residence principle leads to an efficient international allocation of capital, can therefore only apply if true economic depreciation makes rate differentials in the allocation of capital invulnerable. Distortions from accelerated depreciation, untaxed capital gains and other divergences from correct accounting would thus have to be excluded. This system as well as dual imputation and dividend deduction attempt to reduce or eliminate the discriminatory treatment of various forms of corporate earnings by adhering more closely to the requirements of a global progressive income tax.

The second set of choices, viz. the allowance for corporate equity (ACE) and a cash-flow tax, focus on the desirability of tax neutrality. Cash-flow tax that entails an immediate write-off would be the ideal option under the source principle. Various types of cash-flow taxes exist, eg the R-based tax, the flat tax, the X-tax and the R-plus F-based tax (McLure 1997b). Full neutrality can be achieved under the flat tax, which is a cash-flow equivalent. An origin-based direct tax (source-based tax) or a value-added income tax (VAIT) is therefore applicable and replaces the current PITs and CTs. Under this tax, value added, consisting of wages and capital income, is determined by deducting purchases (including investment goods) from sales. Wages are deducted and taxed separately at the individual level, permitting a basic exemption and progressivity. Remaining capital income is taxed at a flat rate without any basic exemption. These taxes effectively tax pure profits and are sometimes also seen as a viable option for unincorporated (small, micro and medium) enterprises. Although these taxes could solve administrative difficulties in taxing interest as discussed, the tax would not solve problems related to the determination of the source of business income and other transnational problems such as obtaining a foreign tax credit for business.

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38 For a full discussion on the lack of exchange of information between countries worldwide, see Alworth (1997:215).

The third set of choices, viz. the comprehensive business income tax (CBIT) and dual income tax (DIT), tax all corporate earnings in full, but at the same low, proportional corporate/personal tax rate. This approach is thus a middle-ground approach. Sinn (1990a) argues that efficiency is possible with all of these approaches, but a “fine tuning” of tax rates would be required to compensate for base divergence because it is levied at source. It seems that the middle-ground approach could be a viable contender. The literature seems to favour a source-based tax similar to that of CBIT. CBIT would tax all but the smallest businesses on total earnings before payment of any interest or dividend, but would not tax dividends or interest received by shareholders or holders of debt. The objectives of this approach are: to eliminate any tax incentives for corporations to turn to borrowing rather than equity to finance their operations; to tax corporate and non-corporate business alike; and to reduce the tax differential between retained and distributed earnings. CBIT would also be self-financing and would permit the lowering of the corporate tax rate (US, 1992).

CBIT that is essentially based on gross income would avoid double taxation of dividends and the effective exemption of interest income because it would be taxed at corporate level. Those countries that usually implement the source principle, would welcome a unilateral adoption of such a tax because it could expand their tax base. The opposite holds for capital-exporting countries. This aside, international taxation is currently based on net income and it remains unclear whether current taxation laws in countries implementing the residence principle would be adjusted to make provision for foreign tax credits on such tax. This type of tax cannot be applied in countries where the CT- and PIT rates are quite different. In this case, the DIT option would have to be explored.

The DIT option in a certain sense makes provision for optimal taxation (Ramsey rule) because capital income is subject to a uniform rate that is equal to the lowest individual income tax rate, and only income from labour is subject to graduated rates. The DIT option is similar to cash-flow tax, under which income from capital is subject to a scheduler tax equal to the top rate applied to labour income. Although the different tax systems hold advantages in terms of specific countries, a unilateral adoption would require a re-negotiation of treaties to make provision, for instance, for foreign tax credits. In this case the importance of tax incentives as a measure to attract investment, especially in developing countries, should also be taken into account.

### 3.4.1 Tax incentives and developing countries

It is clear from the discussion thus far that under ideal conditions, there would be no case for tax incentives. Effective tax rates would be equal to statutory tax rates, and consequently the METRs across all assets and sectors would be equal, capital would be used in the most productive way and resource allocation would be optimal. In practice there is no such ideal system, and capital income tax systems have generated, intentionally and unintentionally, numerous tax incentives across assets, sectors and over time. In sections 2.3 and 2.4, tax optimality (including the Ramsey rule) is discussed to find workable solutions in tax design. On the one hand, it is argued that tax competition (incentives) or under-taxation is sub-optimal in terms of public service delivery but it is also accepted that governments are responsive and have the best interests of their citizens at heart. It is, however, debatable whether deliberate intervention by these governments would secure optimality. Sinn argues that a “fundamental selection bias toward (government) activities that have proved to be unsuitable for private markets” may develop (1997). If private markets fail to provide particular goods and services efficiently, introducing then competition among governments that seek to provide them, for instance through tax competition, will generate government failure. It follows from welfare economics that bureaucratic or government failure is worse than market failure and difficult to correct. On the other hand, exploitive or leviathan governments also exist, and in this sense it is argued that tax competition can limit the size of these governments and therefore make them more responsive toward their constituents.

Shah (1995:2) defines tax incentives as “those provisions in the tax code that afford preferential treatment to some activities over others, eg tax holidays and credits for investment in certain industries<sup>39</sup>, assets, businesses, or financing. The OECD (2000) discusses various preferential tax regimes that can be “harmful”. These fall under the following categories: (1) insurance, eg offshore banking units; (2) financing and leasing, eg venture capital corporations; (3) fund managers, eg portfolio investment corporations; and (4) banking, eg international financial service centers (sec 4.4).

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<sup>39</sup> Various developed countries, notably the US and Canada, differentiate between large corporations in manufacturing and non-manufacturing, normally with lower CT rates for manufacturing industries. Several European countries show the same kind of discrimination between industries, notably Ireland, which is sometimes also treated as a low-tax country or tax haven (sec 4.4).

The following preferential schemes are normally utilised in developing countries (Shah & Toye 1990:151):

- (1) A subsidy that is independent of the scale of investment, but conditional on a maximum level of profits. The main scheme of this type is the *tax holiday*, defined as total (or partial) exemption of new or expanding firms from direct taxation for a specified period;
- (2) A subsidy that is dependent on the scale of investment and conditional on a minimum level of profits. A “*special first year*” and subsequent annual percentages of an asset's cost that are deductible from taxable income, is one examples. Allowances are also known as accelerated depreciation, because they allow the asset to be written down for tax purposes faster than would be possible under normal accountancy depreciation rules. Other examples include tax credits, investment allowance, and development rebates, which allow a further percentage of the asset's costs to be deducted from taxable income, over and above the depreciation provisions for writing down the asset's historic cost;
- (3) A subsidy that is independent of the scale of investment and not conditional on a minimum level of profit. The main example here is the *waiver or rebate* of duty paid on imported capital goods and sometimes raw materials by new or expanding firms; and
- (4) A subsidy that is dependent on the scale of investment but not conditional on a minimum level of profit. An *investment grant* whereby a given share of a firm's investment cost is paid for by the government is an example.

Although not always clear which one of the above-mentioned schemes is beneficial, it is argued that some objectives, such as regional development, are more justifiable than others. Research and development could also be added. In general, commodity tax incentives (such as exempting raw materials from VAT) should be avoided and granting of incentives should be minimised to avoid rent seeking. Accelerated depreciation is seen as the most acceptable scheme, followed by investment allowances or tax credits, with tax holidays and investment subsidies the least acceptable (Tanzi & Zee 2000: 29).

In section 2.7 it is pointed out that one of the major disadvantages of *tax breaks* is that some fraction of firms may choose to leave a region after the initial tax break has expired (plant migration), seeking tax breaks in other regions. The firm's turnover will therefore increase and become excessive via such a move. A subsidy is thus followed by taxes, resembling those *temporary* tax concessions that characterize *tax holidays* (Bond & Samuelson 1986; King &

Welling 1991; King, McAfee & Welling 1993; Doyle & Van Wijnbergen 1994). In contrast to the latter, Wen (1997:144) argues that a tax holiday can have a definite positive effect.

Taxation can reveal a government's trade-off between its desire for public spending and its tolerance for capital flight, and this could be a platform for a low-spending government to signal its type credibly to the international capital market. It can therefore signal permanence in government intent or *commitment* concerning future tax policy, so much so that a subsequent tax reform effort would eliminate tax holidays but reduce the statutory tax rate to attract foreign investors. This commitment can, however, go "sour" where governments cannot keep to their commitments. *Political risk* plays a major role here, should subnational governments default on their commitments. Tremendous administrative costs for governments and investors are involved with unacceptable time lags<sup>40</sup>. It is advisable that corporations differentiate between the different levels of governments' tax policies and although there is normally an overarching national government normally to assist, it should not be assumed that subnational governments' intent is automatically also national intent (World Bank 2000:83).

In practice, results concerning the efficiency and effectiveness of tax incentives tend to be negative. These incentives are normally used in developed and developing regions to foster industrial and technological development (see Shah 1995)<sup>41</sup>. Developing countries do, however, differ from developed countries in two respects when it comes to fiscal incentives: First, if the fiscal concession or subsidy is a reduction or exemption from customs duties, the developing country commonly sustains a significant loss of tax revenue. Second, exemption from export taxes can, in practice, only occur in developing countries, ie capital-importing countries. Varied and generous types of tax holidays exist in developing countries, which are also connected to export processing zones (EPZ), free trade zones (FTZ), and so forth<sup>42</sup>. Moreover, results suggest that these incentives attract little additional investment, drain revenues in the regions that grant them and are counterproductive because investment procedures become too complicated and sometimes lead to more corruption (Bergsman 1999). If not properly targeted, these incentives can entail a heavier burden on the administrative capacity of developing countries that is normally limited. Sinn (1987) argues that investment incentives do not necessarily improve a

40 Recently, the Indian state of Maharashtra could not keep to its original commitment to a US corporation because the state lost the 1995 election. The same kind of problem also occurs occasionally in developed countries. After Mercedes built a new automobile plant in Alabama, US, a newly elected governor in 1994 renegotiated the tax package for Mercedes on the basis that too much was given to the car manufacturer, leaving the state in deep financial trouble.

41 Tax incentives in a developing context will be addressed in greater detail in chapter 5.

42 The World Investment Report (UNCTAD 1999:453) provides a detailed list of these tax holidays in developing and transitional economies as well as the main investors in these schemes.

country's competitiveness in international trade. Other factors such as flexible exchange rates, where capital imports equal the current account deficit, should also be taken into account. Market power vested in a few firms, and ownership and control by foreign investors with access to foreign tax credits, severely constrain the effect of tax incentives in stimulating investment in developing countries. Tax holidays are therefore regarded as poor instruments for the promotion of new investment in developing countries. The provision of tax exemptions, however, will not frustrate the effectiveness of tax incentives granted by developing countries (Viherkenttä 1991). As already mentioned, the source principle and thus the exemption method normally apply only to direct investments. Where the nonresident's residence country applies a tax credit method (Article 23B of the OECD Model Tax Convention), the tax incentive may be curtailed to the extent that the residence country will allow a deduction only of the tax actually paid in the source country. This means that if a nonresident's residence country cannot secure a tax credit in the home country for a tax incentive in the host country, the latter is actually exporting the tax base instead of providing an incentive to invest - especially where no double taxation treaties exist between countries.

The hybrid residence principle where tax credits are utilised, therefore frustrates the source countries' incentive legislation. To avoid this result, some countries have agreed to include "*tax-sparing*" treaties with developing countries. Tax sparing is the practice by which home countries amend their taxation of foreign source income to allow firms to retain the advantages of tax reductions provided by host countries (Hines 1998:2). In the case of a credit (residence) country, tax-sparing provisions enable the investor to receive a foreign tax credit for the taxes that have been "*spared*". Where an exemption country applies the credit method, eg in respect of portfolio dividends or interest (Article 23A of the OECD Model Tax Convention), a tax-sparing provision enables a crediting of the tax that has been spared in the source country. These exemption countries mostly provide tax-sparing agreements whereas the credit countries restrict them (the US has not entered into any tax sparing agreements).

Hines (1998), comparing Japanese and US investment patterns, finds that the volume of Japanese FDI located in countries with which Japan has tax-sparing agreements is 1,4 to 2,4 times larger than it would have been otherwise. Most industrial countries, notably OECD members, therefore have tax-sparing agreements with non-members such as Argentina, Brazil, China, India, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Venezuela. The efficiency of these tax-sparing agreements is, however, questioned by the OECD (1998:41), partly because of

the inefficiency of tax incentives in these countries (OECD 1995). These concerns relate to the potential for abuse and the costs involved of such abuse when tax sparing is offered; the effectiveness of tax sparing as an instrument of foreign aid; and general concerns with the way in which tax sparing may encourage countries to use tax incentives. This again links to the OECD (2000) concern about “harmful” tax competition (sec 4.4). The OECD (1998:42) recommends a reassessment of the need for tax sparing, especially in countries that have reached a certain level of economic development.

The developmental status of countries plays an essential role in tax coordination and reform issues. In summary, it is suggested that developing countries need support up to a certain point but also need to claim a competitive place in international trade and investment. In this context, robust neutrality<sup>43</sup> can be provided through a combination of the destination principle, immediate depreciation (sec 3.4.1.4), and the source principle. This will provide administrative advantages but also inter-temporal neutrality. Where immediate depreciation is not allowed, the destination principle ensures robust neutrality only for the commodity tax, in this case, VAT. Harmonisation of the tax base and rate are, however, necessary. These situations do not always occur as accurately in real life and treaties may play a significant role in reaching these objectives.

### 3.4.3 Tax treaties

Income tax legislation or treaties that results in a tacit worldwide acceptance of certain legal principles for the taxation of inward and outward investment emerged in the early part of the twentieth century in industrialised countries. These principles include non-discrimination for foreign investors; neutrality by avoiding double taxation of income; and reciprocity. Several bilateral tax treaties have therefore been put into effect among most industrialised countries<sup>44</sup>.

Fewer treaties exist between industrialised and developing countries, and to an even lesser extent

43 Robust neutrality refers to a country's ability to choose a tax rate freely without affecting its international competitiveness. Robust neutrality is the borderline case between additive and subtractive neutrality. Subtractive and additive neutrality means that taxes do display an affect on a country's international competitiveness. Subtractive neutrality refers to the idea that an increase in one domestic tax (for instance a direct tax) requires an increase in the other (for instance an indirect tax) to maintain a country's competitiveness. In contrast, additive neutrality refers to the idea that an increase in one tax must be compensated for by a decrease in the other (Sinn 1987).

44 Bilateral relations have also led to the use of 'competent authority' to settle transfer pricing disputes between countries and 'exchange of information' agreements to combat tax evasion. Most of the approximately 1500 bilateral tax treaties in force worldwide are based on the OECD Model Tax Convention between member and non-member countries but also between non-member countries of the OECD. The importance of the OECD Model is further evidenced by the fact that about 90 % of the text of the UN Model Tax Convention is based on the OECD Model. Multilateral discussions have therefore resulted in the development of the OECD and the United Nations Model tax treaties for the taxation of income and capital, OECD transfer pricing guidelines and recent OECD discussions on 'harmful tax competition' and the EU discussions on a 'code of conduct for business taxation'.



between developing countries. An equal two-way flow of receipts, ie dividends, interest, royalties and profits, between two countries would ensure the elimination of double taxation without either country being disadvantaged (Shoup 1967). If the flow is, however, only in one way direction there is no such basis for reciprocal action, which also helps explain why developing countries, mostly capital importers, do not easily enter into tax treaties with capital-exporting countries.

Tax treaties develop as a consequence of the need for precisely defined rules relating to the application of tax credits and the source principle. Source rules allocate income, specifically profits, among two or more sources (countries). Production, for instance, may occur in one country, and the selling activity by the same firm in another country. If two countries differ in their source rules, double taxation or tax escape may occur, even under a tax credit (Shoup 1967).

Tax treaties may also be needed for the definition of residence and, at the same time, *the determination of the source of income*. Besides tax-base reform, as already discussed, the effective determination of the source of income is one of the challenges facing governments worldwide. Governments use different methodologies when calculating transfer prices and thus different prices to assess income.

#### **3.4.4 Transfer pricing**

Treaties can be used to resolve disputes between governments when determining transfer prices. Transfer pricing affects the value of international trade because a high proportion of it consists of trade between subsidiaries of multinational corporations (MNCs). It is argued that transfer pricing can be unfair and used to avoid corporate taxation in high tax countries. MNCs can, for instance, manipulate transfer prices and concentrate debt in high-tax jurisdictions to minimise their overall tax burdens. Administrative efforts to prevent such abuse are normally complex, eg taxing the income of controlled foreign corporations (CFCs), which normally include the income of branches or subsidiaries of local corporations (OECD 1995). Instruments such as derivative financial instruments (DFIs) are also utilised to restructure portfolios for the purpose of avoiding tax at source (Alworth 1997).

Increasingly, tax codes and rules will be developed in terms of “fair transfer pricing”<sup>45</sup>. Since many of these goods are marketed inside the organisation, arbitrary pricing rules are used. At present, countries generally tax the pretax profits of multinationals based on separate accounting principles with an arm's-length pricing standard. Eden (1998) provides a full description of alternative transfer pricing methods. The arm's length system entails that domestic and foreign operations are treated as separate enterprises doing business independently - “at arm's length”. A transfer-pricing regime therefore involves a complex allocation method of determining income in each jurisdiction, and depends mainly on how the profit rates are determined for transfer prices<sup>46</sup>.

Formula apportionment or allocation<sup>47</sup> can be used in conjunction with, or as an alternative to the arm's length method of separate accounting. According to Mintz (1998: 16) the use of allocation methods in federations provides more autonomy for governments, since they can choose their own rates to adjust public revenues. Governments can have a common allocation formula for the whole country, or subnational governments can vary on the base or factors for apportioning the income. This system recognises the highly integrated nature of a group of related corporations, which often makes it conceptually impossible to know the geographic source of income. The system therefore deals automatically with problems caused by non-taxation and the manipulation of transfer prices. If governments do not agree on the apportioned shares, over- or under-taxation may result. Governments should therefore agree on a uniform system that entails a common base for measuring corporate income, and shares for allocating the corporation's income to each jurisdiction where a permanent establishment resides. Tax rates could then still differ.

The system is not without problems. An income tax based on formula apportionment effectively taxes what is in the formula, at rates that depend on the overall profitability of the corporate group<sup>48</sup>, not income actually originating in the taxing jurisdiction. Taxation of income from exploitation of exceptionally valuable natural resources is the most obvious example because such income originates where the resources are located. Resource-rich countries may, as an alternative measure, implement supplemental taxes other than income taxes. Formula apportionment does not either work satisfactorily where it is needed the most, ie in the taxation

45 The way in which transferred goods and services within large organisations, especially MNCs, are priced.

46 Elitzur and Mintz (1996:417) investigate capital income tax competition in the presence of transfer pricing rules and suggest that if one country raises its effective tax rate, the other will strategically lower its own. Gresik (1997) goes further and argues that a country's ability to engage in strategic transfer pricing can result in a Pareto-improving tax competition equilibrium.

47 The term “apportionment” is used to refer to corporate income being divided across states whilst “allocation” refers to non-corporate income being assigned to a particular state, such as in the US. In Canada, however, “allocation” refers to a more uniform division of corporate income across provinces, essentially through a surcharge on the PIT.

48 The formula utilised in the US typically includes specific factors (payroll, property, and sales) and weights assigned to each factor (typically one-third).

of income from intangibles such as patents and trademarks in pharmaceuticals and electronics. In these cases, it is impossible to know the location of intangible property. The last problem with formula apportionment involves the administrative burden on multinationals and governments. The system can only work where national tax systems are similar in terms of the definitions of income and unitary business or where the system is implemented through a surcharge on the national tax<sup>49</sup>.

McLure (1996 & 1997) argues that developing countries, being short of administrative resources, may welcome a shift to formula-based taxation, since this would produce a more manageable task of determining their share of the apportionment factors of MNCs doing business within their borders. The mutual trust needed between countries is difficult to achieve. This can also be seen from the discussion on the exchange of information. In summary, bilateral treaties have to be negotiated in such a way as to support both developed and developing countries' objectives. This could involve a re-evaluation of tax incentives in developing countries, as well as the tax-sparing activities between the two groups.

### **3.5 FISCAL DECENTRALISATION AND TAX COORDINATION MEASURES**

From the previous discussion, it has become apparent that economic integration and globalisation have made international transactions more complex. Compliance and administration costs have thus become more important for governments and private corporations. Concerning the free flow of business activity, countries use treaties that apply rules concerning the tax principles implemented, to limit tax discrimination among residents and nonresidents. Apart from this, double taxation remains a problem because of different accounting practices and anti-avoidance measures such as thin capitalisation and earnings-stripping rules<sup>50</sup>, different allocation methods, and withholding taxes on nonresidents<sup>51</sup>. These problems can be ironed out by way of improved accounting practices and harmonised corporate tax bases, but also through a re-negotiation of double taxation treaties.

In this section, more attention will be given to horizontal and vertical tax coordination between

49 This is not the case in the US where separate subnational legislation and administration of the CT lead to substantial problems. A surcharge on the tax of the national government ("piggy-backing") could be used to solve these problems. The state tax base would be the apportioned share of the tax base of the national government and apportionment would be accomplished by the uniform application of a single formula.

50 Thin capitalisation specifically refers to the funding of a corporation with a disproportionate degree of debt as opposed to equity. These rules are usually used to protect a country against "tax abuse" as it becomes more attractive in terms of investment, ie to protect it from being turned into a tax haven (OECD 1987).

51 Withholding taxes are often imposed on interest, royalties, fees and rents paid to residents and nonresidents.

different levels of government within a country or economic union. Vertical tax coordination refers to a "pyramidal" coordination between government units on different levels. It is always cooperative in the sense that different levels of government, usually after ongoing negotiations, agree *inter alia* on specific tax coordination measures.

### 3.5.1 Tax assignment

Chapter 2 emphasises the need for corrective measures such as Pigovian tax-subsidy schemes, including matching grants and lump-sum transfers when tax competition leads to an under- or over-provision of public services. The assumption is made that a Leviathan exploitive government is present. It is also argued that tax competition could be used as an efficiency-enhancing tool in the sense that politicians could become more responsive to the needs of citizens and counteract the negative effects of irresponsible taxation and spending. The correct assignment of tax responsibilities could avoid the depressing effects of tax competition and spur efficiency-enhancing tax competition.

The following suggestions should be taken into account when assigning taxes or taxing powers to different levels of government (Musgrave 1959 & 1983):

- (1) Progressive taxes, especially for re-distribution purposes, should be assigned to national government, eg personal income and corporate- tax. Such taxes are to be avoided at lower-level governments because of the incentive created for migration among jurisdictions
- (2) Taxes suitable for economic stabilisation should likewise be centralised, eg value-added tax and personal income tax. Taxes assigned to lower-level governments should be less sensitive to economic and business fluctuations, ie they should be cyclically stable, eg motor vehicle taxes
- (3) Subnational taxes on mobile capital, eg state or local corporate income tax can, introduce troublesome and costly administrative complexities if corporations are able to shift the accounting base of the tax to lower-tax jurisdictions. Location decisions regarding economic activity will be distorted, which will undermine neutrality in taxation. Residence-based taxes such as excise taxes should rather be assigned at subnational levels of government
- (4) Tax bases that are unevenly distributed among jurisdictions (natural resources) should be centralised. This is to avoid geographical inequities and prevent allocative

distortions that can result from local taxation on such resources

- (5) Lower-level governments are better advised to employ taxes on immobile tax bases, eg land and property, and whose burden is not exportable to other jurisdictions. In principle, these taxes create no potential distorting incentives for movements among jurisdictions and involve Tiebout-type efficiency
- (6) User charges and benefit taxes may be charged at all levels of government

In summary, national governments are in the most beneficial position to employ progressive redistributive taxes, whereas highly decentralised levels of government should seek out immobile tax bases. Intermediate-level governments such as states or provinces have more scope to manoeuvre than small local governments and to this extent, income and commodity taxes can be used, although potential mobility imposes a constraint on tax policy. It is concluded that the distribution and stabilisation functions of governments should be centralised, whilst efficiency gains in terms of the allocation function are much larger at lower levels of government. Tiebout (1956) and Oates (1972) also emphasise this argument. Decentralised tax powers can promote innovation because subnational governments can experiment with various fiscal packages, within the limits of fiscal accountability.

Tax or revenue assignment (sources of revenue) can be ranked according to the degree of fiscal autonomy normally provided to intermediate and local governments. In the following sections, the different ways that can be used to achieve a continuous flow of revenue to particular levels of government will be discussed. These flows may have diverse effects concerning the possibility of tax competition and costs of administration and compliance.

### **3.5.1.1 Fiscal autonomy in comparison to centralisation**

Complete fiscal autonomy, which involves independent legislation and administration, offers the highest degree of fiscal autonomy to subnational governments. The latter can choose the tax, define the base, set tax rates, and administer the tax. This is the quintessential approach in the US. It often involves unnecessary duplication and complexity costs where diversity is allowed in, eg in the definition of the base. These costs differ from one tax to the next; for some it is trivial, but for others it can become enormous. State corporate income tax found in the US, (sec 3.4.1.3) as well as the state VAT of Brazil, exemplifies the latter.

Brazil has an origin-based state VAT but both the local and federal government also levy limited forms of VAT. All the problems mentioned under section 3.3, arise. This non-uniform system causes all kinds of administrative and compliance problems. Apart from this, imports enter the country through the relatively prosperous south, where they are subject to VAT. Exports leave from the poor north-east which must rebate tax paid at prior stages. A complicated system of differential tax rates for interstate trade, with tax competition and exporting as consequence, as well as elaborate transfers, has been created in an attempt to cope with the obvious resulting inequities. Russia and the Ukraine have, in effect, imported the same problems by adopting a form of tax sharing that returns VAT revenues to the oblast and municipal governments where they are collected. It is moreover argued that an acceptable system of subnational VAT is difficult, but not impossible, to accomplish, especially in developing countries (Bird 1999). In some cases, these taxes are levied independently of similar national taxes (tax separation) but in some cases the taxes are linked, as described in section 2.6. Because VAT provides a substantial revenue source, especially in terms of developing regions, options in terms of subnational VAT should be explored (sec 5.4).

By contrast to complete fiscal autonomy, *complete centralisation* occurs if taxes that can be assigned to subnational governments, are assigned entirely to the national government. National government may use part of its tax revenues to provide grants to lower-level governments, especially if the latter have inadequate access to buoyant sources of revenue. The Australian federation makes substantial use of this approach.

### 3.5.1.2 Tax surcharges

Subnational surcharges or “piggy-backing” provides subnational governments with the most important element of fiscal autonomy, viz. the power to determine the tax rates, without the costs that commonly plague subnational legislation and administration. Tax overlapping appears because a nationwide tax base is still applicable. There are two ways to implement surcharges, be they centralised and decentralised: In the first case, national government implements the surcharges and sends the revenues to the appropriate subnational government. Canada uses provincial surcharges on the national PIT base (sec 3.4.4.). There is considerable cooperation between these governments, creating the need for a uniform definition and division of the tax base. A high degree of migration could, however, affect the applicability in that this method could cause tax exporting. This type of surcharge should rather be implemented on a residence

(destination) than a source or employment (origin) of corporations or individuals, reducing the potential distortionary aspects of differential subnational taxes but with administrative implications as explained in section 3.4.4. Moreover, Bird (1999) argues that the approach does not seem to offer much, especially for developing countries.

With a decentralised system, differences between subnational governments can be allowed in terms of tax rates, definitions of taxable income, and even apportionment formulas and other methods of dividing income among subnational governments. In some cases, the only element that would be central is certain administrative functions. In this case, non-uniformity could involve a certain degree of tax competition.

*Tax denial or tax restriction* can be used where a higher-level government denies its lower-level governments the power to levy certain taxes, or places a ceiling on the tax rate they can use, or require that any upward change in the tax rate be approved by the legislature at the higher level. These restrictions sometimes reflect the fear of the higher-level government that the common economic base for all taxation will be impaired or misused through double taxation, if the lower-level governments are not held in check. It may happen that local government imposes a tax on a combined residence-source basis, with no credit. Restrictions will, however, not be needed by the higher-level government if it first imposes the tax or, at any rate, moves the rates to high levels before the lower levels make intensive use of the tax (Shoup 1967). Apart from this, lower-level governments still possess much more power and responsibility than they do under a system of linked taxes (tax crediting) and tax sharing.

### **3.5.1.3 Tax sharing**

Tax sharing eliminates all subnational fiscal autonomy. It can be seen as a highly-centralised surcharge where surcharge rates of all subnational governments are constrained to be equal. National government makes all the decisions on both the tax base and rate, and administers the tax. Tax sharing is normally acceptable in countries where a higher value is placed on uniformity than subnational autonomy, eg in Germany.

It is important to distinguish between surcharges and tax sharing because of their apparent similarities. In both cases the national government determines the nationwide tax base. Under tax sharing it applies the same tax rate, regardless of where the tax base is located. The revenue

shares are then allocated to the various subnational governments where the tax base is located, commonly in proportion to their contributions to the aggregate tax base (origin- or derivation-based). This step may require the use of formulas to allocate the tax base among governments.

Under a system of surcharges, the tax base is divided among the subnational governments (in some cases through the use of a formula), which choose the tax rate to be applied to their share of the base. Both systems have the benefit, relative to complete fiscal autonomy, of the taxpayer needing to comply with only one tax law and having to deal with only one set of fiscal authorities. Under a system of surcharges, the individual subnational governments have the power to determine the tax rates applied to their shares of the tax base; under tax sharing the national government makes this determination (in some cases through negotiation with subnational governments acting jointly, as in Germany).

In contrast to revenue sharing, tax sharing is a more decentralised tax system, decentralised in terms of tax collection (tax administration). Both tax and revenue sharing should relate to any national government tax that (a) is progressive and/or has a large built-in elasticity (personal income tax or corporate income tax) and (b) is less distorting and is a large revenue source (VAT and excise duties). In terms of tax sharing, a wealthier lower-level government will get a larger share of the total under a progressive income tax if the distribution is by origin of revenue rather than by origin of base.

Tax sharing on a non-origin basis is similar to a straight grant-in-aid or intergovernmental transfer. The exception is where the amount to be distributed each year is determined, not by an annual appropriation process, but by whatever the base and the yield of the tax happen to be. In this case tax sharing is also known as tax aid. Many have argued that the “German” solution of centralised VAT with some of the revenue shared with the “länder” or states on a formula basis are probably the best approach (Tait 1988). Horizontal imbalances between subnational governments can be addressed through an equalisation formula that is designed for redistributive purposes. In the German case, VAT is then finally apportioned, not on an origin/derivative basis, but on a per capita basis. The equalisation formula can therefore be structured to produce redistributive outcomes in favour of the poorer states. Other combinations of indicators adjusting for population numbers, income per capita and tax effort can be utilised in a similar fashion.

There can also be an indirect form of tax sharing when one jurisdiction, eg national government,



exempts the interest on obligations of another jurisdiction from its income, eg a subnational government. Part of the revenue thus lost goes to the borrowing jurisdiction in the form of lower interest rates for its obligations. Another part goes to high-bracket taxpayers. A revenue matching grant between the governments involved, equal to the revenue loss of the passive government or the borrowing authority, would internalise this externality or relinquish the benefit received by the borrowing authority.

### 3.5.2 Revenue-sharing and grants

Revenue sharing can be used to achieve an objective not amenable by complete fiscal autonomy, tax surcharges and tax sharing, or in combination with these methods. Under revenue-sharing national revenues are shared with subnational governments on the basis of one or more formulas but the returned revenue does not pertain to the source of this revenue, eg to the subnational governments that would have collected the funds had they imposed the tax themselves.

Lower levels of government mostly do not collect enough revenue to meet their expenditures, and have to rely on transfers from the national government (downward funding) to cover the *vertical imbalance or mismatch* that arises. Revenue sharing can be seen as a transfer which can take a variety of forms. Individual taxes can be shared; taxes can be pooled and shared, and revenues from certain taxes can be earmarked for local governments. Revenue-sharing has much in common with unconditional grants, in that both give localities the ability to provide public services independently of their taxable capacity. Lower levels of governments would probably favour revenue-sharing over grants because it is automatic rather than discretionary, and would generally support higher levels of spending. Donor governments would prefer grants, specifically conditional grants, because these allow them to control their budgets effectively.

Inter-government grants can be divided into two main groups: viz. *general-purpose or unconditional grants*, and *specific-purpose or conditional grants*. These grants can be flat (equal to the sum raised by a subnational government); proportionate (proportional to the contribution of the recipient government); or a percentage (percentage of the cost to the recipient government for maintaining a particular programme). The donor government can therefore *match* the spending by a subnational government in a certain way. Grants can also be *non-matching* where a lump-sum transfer is independent of the level of subnational spending.

In comparison to the other methods of tax coordination or taxing powers assigned to subnational government, grants-in-aid are entirely independent of any particular tax imposed by the donor government. The effect of this grant varies rather with the *degree of decentralisation* built into it. On the one hand, it displays almost no decentralisation and the lower-level governments act as executing agents with the method of execution directly stipulated by the donor government. This grant can also be seen as the expenditure-side analogue to a tax credit. The specific-purpose grant or conditional grant promulgates ideas directly in opposition to the tax credit (local administration of taxes, modest degree of fiscal independence and maintenance of the existing geographical inequalities in income and wealth). On the other hand, decentralisation is almost complete with a higher-level government distributing the grant by some formula that implicitly or explicitly involves need and capacity and perhaps effort. This is the general-purpose or unconditional grant, and this grant is not related to specific services or classes of rate-payers.

### 3.5.2.1 General-purpose grants

Unconditional grants refer to non-specific or non-earmarked disbursements for the running of local or subnational governments. They are commonly determined by a formula that is a function of demographic characteristics, and economic and social factors. *Block grants* also fall into this category and are un-hypothecated grants from national to subnational authorities and are not related to specific services or classes of taxpayers<sup>52</sup>.

General-purpose grants can be sub-divided into non-matching and matching grants. The *unconditional non-matching* grant is the simplest and most decentralised form of grant. It distributes money as a lump-sum transfer to subnational governments with no constraints on how the money can be spent. The donee government may spend it on any public service, or provide tax relief to its citizens. The grant can be used at the discretion of the lower-level governments and an equal per capita benefit, for instance, can be assured. Differences in abilities of donee governments (own tax effort) can automatically be accounted for in the sense that a smaller percentage is allocated to poorer jurisdictions and a higher percentage to wealthier jurisdictions.

*Unconditional matching grants* can be sub-divided into grants differentiated according to *relative*

<sup>52</sup> In South Africa, revenues are pooled and subsequently divided amongst national government and the nine provinces. An equitable share for each province (block grants) is by far the most important source of revenue for the provinces with conditional grants second in line. The block grants thus entail the transfer of a global lump sum to a subnational government, to be spent at its own discretion.

*resources* and those differentiated according to *relative effort* or sacrifice (own tax effort). In the first instance, a more explicit account can be taken of differences in the ability to raise revenue by setting the per capita grant at a higher level for poor donee governments than for wealthier ones. Greater weight is thereby given to distributional factors. In this case an area can be poor, depending on whether it is defined under the source or residence principle.

As seen in section 2.3, resources will normally flow to areas with lower marginal productivity, but poorer areas defined under the source principle may not necessarily have low marginal productivity. It could be that the industries here are labour-intensive or that little economic rent per worker is generated. A poor area defined under the residence principle, is likely to have a low marginal productivity of labour, provided that inhabitants of most areas receive mainly labour income. The source principle therefore reveals nothing about marginal productivity, and the residence principle only indicates that the marginal productivity of labour in an area is probably but not necessarily low. Differential grants should therefore only be allocated to those areas where the residency of the poor can be determined, and labour-force residents should be discouraged to locate in these areas. This restricted rule fails, however, when externalities (positive in this case) are taken into account. The economy's total product and not just the beneficiaries' can, for instance, be increased as a result of these grants in low productivity areas. There is thus no Pareto-efficiency argument against differentiated grants that give more per capita to poor areas than to the rich. There is also no general argument, on the same grounds, against giving more to rich areas than to poor. Each case must be evaluated individually to ascertain what the relative marginal productivity is and what externalities need to be taken into account (Rosen 1998:502).

Matching grants can also be transferred in accordance to the relative effort or sacrifice (own tax effort). The donor government's grant on distributional grounds is made on the condition that the donee government shows that it is making an adequate effort with its own tax system. A minimum tax rate, where the base is seen as a minimum percentage of aggregate income, for instance, can be stipulated as a condition for aid. The benefits and costs of such assistance are thus important. A rich country or a higher-level jurisdiction can give assistance to a poor country or lower-level jurisdiction on the assurance that the donee government is making an adequate effort in the public sector relative to its effort in the private sector. The degree of effort or sacrifice varies inversely with the extent to which it exports the tax burden to other jurisdictions via shifting (Shoup 1967). An allowance can be made for this by subtracting the part that is

estimated to be shifted elsewhere, from tax revenue actually collected.

### 3.5.2.2 Specific-purpose grants

Conditional or categorical grants are characterised by earmarking and are efficacious in stimulating state and local expenditures in specific expenditure programmes. The national government (donor) specifies, to some extent, the purposes for which the recipient government may use the funds. The allocation and spending of conditional or categorical grants is often marked by close attention to detail and procedural guidelines.

Conditional grants can be sub-divided into non-matching (or non-sharing) and matching (or sharing) grants. With a non-matching grant, national government as the donor agent gives a fixed sum of money (without subnational matching) with the strict provision that it will be spent on a specific public good. Hence, the lower level of government is required to supply more units of public goods for delivery to the community. Subnational governments often use a portion of the *conditional non-matching* grant money to reduce their own taxes (Rosen 1999). The donee government is effectively the administrative agent for the donor government's programme, and supervision may be so high on the agenda that the donee government becomes (for the programme) a branch of the donor rather than its agent. The donee government is free to cut back on its own spending, if any, for the programme, and this 100 % grant is therefore to some degree a general-purpose grant. This grant must be rationed on some basis other than price or given freely up to the point where the donee government is saturated and finds the usefulness of the grant for the specified purpose to be zero. These grants are, however, most appropriate for subsidising activities considered low-priority by the donee but high-priority by the donor government (Ajam 1999:319).

With *conditional matching* grants, essentially cost-sharing arrangements, the donee government is required to spend a stipulated sum on a programme. The subnational government can be required, for instance, to spend either: (a) an amount equivalent to the yield of a specified rate of tax on the donee government's tax base; or (b) a certain matching or partly matching amount, ie a certain percentage of the total amount spent on the programme from both donee and donor sources.

By contrast to non-matching grants, rationing can be done by way of price or cost and in this

instance conditional matching grants can be sub-divided into open-ended and close-ended grants. The donor government usually places an upper limit on the matching grant. When the donor government's share is large, rationing can be accomplished via agreement about the physical aspects of the programme between the donor and donee(s). When the donor's share is, say, 50% or less the programme is normally *open-ended*. The donor government will pay some proportion of the cost of providing a particular public service or programme, with the donee government providing the rest of the funds. In effect, the grant reduces the price of a public service for the donee government. Since the grant is open-ended, the donee government can use any amount of the grant at the new price, as long as it matches the donor government's contribution by the stated percentage.

As already mentioned in sections 2.2 and 2.3, matching grants (essentially Pigovian subsidies) constitute a rational way of correcting externalities. In this case communities' expenditure programmes generate positive externalities at the margin. An appropriate national government subsidy could enhance overall efficiency. However, national government still has to measure the actual size of the externality or the spillover effect accurately, ie to provide revenue-matching grants in whichever way the spillover occurs. An open-ended grant could be the easiest way of solving this problem. By contrast, with a matching *close-ended* grant the cost to the donor agent ultimately depends on the recipient's behaviour. If a subnational government's consumption of a particular public service is stimulated by the grants, the national government's contributions may rise substantially. With this type of grant, national government pays some proportion of the cost of providing a particular public service but places a ceiling on the cost of an expenditure programme by specifying the maximum amount it will provide.

Matching grants are intended almost entirely to approximate a Pareto-optimum by taking externalities into account. They can be used to, for instance, stimulate economic growth by inducing lower-level governments to purchase more capital goods. If the donor's sharing percentage is low, the high-income donee government may draw down much more money from the open-ended grant than would low-income donee governments. A more unequal distribution may be the outcome, although this could be compensated for by a progressive method of financing the grant. The specific-purpose grant is therefore compatible with a moderate degree of political decentralisation. It is a way for higher-level governments to get something done that they do not want to administer themselves, but which they are willing to help pay for. In summary, inter-government fiscal transfers or grants serve important objectives: alleviating

structural imbalances; correcting fiscal inefficiencies and inequities; providing compensation for benefit spillovers and achieving fiscal harmonisation. The most important consideration is that the grant design should be consistent with grant objectives.

**Table 3.1: Classification of grants**

SPECIFIC-PURPOSE (CONDITIONAL) GRANTS		GENERAL-PURPOSE (UNCONDITIONAL) GRANTS		
Matching	Non-matching	Matching	Non-matching	
open-ended		With own resources or tax	Without own	Discretionary
closed-ended		effort	tax effort	

Table 3.1 gives a short summary of the different grant schemes that have been discussed in this Section. The donee government is mostly seen as the subnational government on the receiving end and the donor, the national government, on the distributing end. These governments can, however, also relate to lower-level governments as donee governments or higher-level governments as donor governments.

Measures similar to grants include, mandates and the consolidation of local governments (Hoyt 1991). Direct (coercive) approaches are used by national governments to secure compliance by subnational governments. These measures or approaches, as well as revenue matching grants do not always ensure that the SMCPF is the same for all governments involved (Dahlby 1996:407). Without proper decentralisation of functions and revenue, agency problems as outlined under section 2.7.4, may still occur.

Another way in which decentralisation can also be linked to the size of government, is the so-called commons problem. This problem arises due to an important characteristic of many government programmes: while they tend to generate benefits that are concentrated geographically (or sectorally), they are often financed from a common pool of resources. Under some institutional arrangements regarding the process of fiscal decision-making, this can lead to over-utilisation of the common pool of resources, as those who benefit from the programme fail to internalise their full cost. Heavy reliance on transfers, unless these are clearly defined, with resources allocated according to objective criteria that cannot be easily manipulated by recipient governments, and with little room for discretion and bargaining between the different levels of government, may weaken the budgetary constraints of the subnational governments. When this happens, there is scope for lower-level governments to shift the cost of local programmes onto

others outside the jurisdiction, which constitutes a commons problem. This problem may intensify in cases where subnational governments have a large degree of borrowing autonomy or seignorage autonomy, in particular if the national government finds it difficult to commit to not bailing them out of financial trouble. In this case, subnational governments may over-borrow and over-spend, and then shift the burden onto the national government.

Hoyt and Jensen (1994:21) suggest that subnational governments and national governments can increase social welfare through an alternative measure, viz. pre-commitment of their policies as regards lower-level governments (sec 2.7). This is especially important in the attraction of FDIs. The World Bank (2000:83) warns that foreign investors should distinguish between pre-commitments by subnational governments and those of national governments, as actions by independent subnational governments do not automatically mean that national governments will bail them out if necessary. Vertical (negative) spillovers occur just as in the case of vertical tax competition. The interplay between intergovernment grants and government borrowing and even competition for central bank seignorage, warrants further attention, especially in developing and transitional economies. It should be ensured through grants that lower-level governments do not become a direct and permanent burden on higher-level government's debt position<sup>53</sup>.

### **3.6 AN OPTIMAL AND EQUITABLE ALLOCATION OF TAXES**

Two underlying principles become clear from section 3.5. First, subnational governments need resources commensurate with their responsibilities, ie finance should follow function. Second, subnational governments must operate under firm budgetary constraints, preventing excessive borrowing and spending which requires bailouts by national governments. These bail-outs place unnecessary pressure on national governments' budgetary and debt requirements, as observed in various developing countries.

Debt requirements are also sometimes used as a strategic variable in tax competition models. Non-tax policies can thus commit governments to change the degree to which they compete in taxes with other governments. By committing to debt today, a government can signal to other governments that it will have to impose higher taxes on capital in future. If these other

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<sup>53</sup> In this respect, the so-called fly-paper effect should also be taken into account. This effect refers to the tendency for a subnational government's spending to increase to a greater extent if that subnational government receives an unconditional lump-sum grant than if its residents receive an equivalent increase in their income. Subnational government will therefore rather spend grants than give tax relief.

governments respond by raising their own capital taxes in future, the first government will have benefited from this reduction in competition for capital (shifting of the tax base). Tax competition as such can affect different governments' abilities to raise taxes or fiscal capacities. Present-day tax competition can increase the political incentive to exploit future generations through excessive issuance of government debt instruments, eg bonds. (McKinnon 1997:76). It is thus essential that information asymmetries and political arguments concerning national and subnational governments be taken into account (see secs 2.7.3 and 2.7.4). For instance, Cremer and Pestieau (1999:145) argue that information asymmetries can distort the optimum in either direction and that the direction depends on the relative proportions of rich and poor households.

Each situation should be seen as unique. It is widely believed that a downward funding approach, ie the centralisation of taxation rather than expenditure decisions, delivers better results. Boadway and Keen (1996) argue, however, in favour of an upward funding approach because of vertical fiscal externalities such as tax competition (secs 2.5 and 2.6). The typical subnational government, in this case a state, may neglect the impact that its tax decisions have on the federal tax base. The optimal federal response is to internalise this distortion of state decisions by means of offsetting subsidies on the common tax base, the financing of which may require transfers from the states. In addition, taxes that were originally seen as unique to one level of government, eg excise taxes assigned to subnational levels, could be centralised in the presence of vertical externalities (Keen 1998:479). The converse also holds and an argument can be made for extensive cooperation between the different levels of government.

Countries or regions do not exist in isolation, but interact with the rest of the world. Coordination can thus, if limited to a sub-set of all concerned jurisdictions, make situations worse. Policy choices by well-meaning policy makers may also be constrained by credibility considerations. If political arguments, such as those discussed in section 2.7.4 are taken into account, the coordination argument loses further ground. Implementing tax coordination within a region, for instance via a federation, through a definition of rules rather than through a delegation of discretionary power, can be seriously hampered by incentive problems and can become costly (Perroni & Scharf 1997:15). The cost of tax coordination should therefore always be weighed up against the benefits gained from tax competition. It is argued that governments seek sufficient autonomy on a national but also international level, so that they can choose the tax structure that best meets their own aims. Increased mobility of capital has, for instance, compelled some governments to act cooperatively to improve the taxation of corporate income.



Ongoing negotiations are involved in order to share the tax base between source and resident regions. Participants can only reach agreement if the latter betters their position, ie a negative-sum game. Tax competition is therefore sometimes preferable since governments are more accountable to their electorate in terms of their willingness to trade off public for private goods. In terms of fiscal externalities, however, taxes are distorted and governments are thus less accountable to their electorate.

The reality of regional integration and also globalisation, with unrestricted capital movements and free movement of goods and services, necessitates coordination of capital income and commodity taxes. Uncoordinated taxes can hold several disadvantages, most of which had been discussed in this and the previous chapter (see also Tanzi & Bovenberg 1990):

- (1) The rate of return to capital (for instance, interest income) across countries would tend to be equalised after and not before taxes and the allocation of capital across countries would thus be inefficient. The potential welfare losses associated with the *inefficient allocation* of capital could be significant.
- (2) *Unilateral fiscal actions* could have major effects on other countries within a common market. The reduction of other policy measures, eg the absence of capital controls, may force countries to use their tax policies to the detriment of others. This could lead to retaliation, a weakening of the common market, and an *underprovision* of some public services. It may even bring about potentially disruptive capital movements that would affect the real exchange rates and make the pursuit of fixed nominal exchange rates more difficult. In the case of commodity taxes, the international differences that exist in, eg VAT harmonisation, arise from the differences in the current-account positions (reflecting the differences in saving and investment propensities) as well as from differences in the tax structures. *Conflicts of interest* may, therefore, give rise to a fiscal mechanism by which the winners compensate losers within countries as well as between countries.
- (3) *Political views* may be imposed through countries' tax policies onto one another within a common market. A policy of lower corporate taxes and consequently personal taxes might affect the *redistribution* actions of others in a negative way and may also force these countries to reduce their expenditure levels below optimal levels. The harmonisation of a commodity tax, such as VAT, may thus give rise to internal conflicts of interest, as pointed out in (b), within each country (arising from changes in the distribution of income among members of each generation as well as among

generations) and between countries. Tax coordination, therefore, does not take into account the differences in preferences for one tax over another, different perceptions on the role of taxation, differences in acceptability and feasibility of various taxes, and differences in preferences for public sector size (moreover the sovereignty of countries in tax decisions). Even if taxes are coordinated, statutory taxes could still differ considerably in their economic manifestation from country to country.

- (4) There should be agreement about the *objective* of coordinating taxes within a region or worldwide. It is therefore not the process of harmonisation that is significant, but the end result. Instead of uniformity, *mutual recognition and equivalence* of the electorate should also determine the direction of tax coordination.

It is obvious from previous sections in this chapter that, as in the case of tax competition, there are various arguments concerning tax coordination. One argument that features in chapter 2 and this chapter is the need to maintain fiscal autonomy whilst reaching the objectives of tax neutrality (efficiency) but also sovereignty (for instance, equity). These objectives can only be reached through cooperative and coordinated actions between levels of government as well as different countries. The desirability of capital-income tax competition and commodity tax competition, ie no tax coordination, can thus to a large extent be associated with political views, as pointed out in section 2.7. The way in which tax coordination should be sustained is, however, not clear. It would involve inter alia the way in which agreements should be enforced and maintained; the viability of tax coordination, eg the effect of lobbying; and how the enlargement of trading blocs can affect the viability of cooperation at a broader level.

To summarise, the minimisation of fiscal externalities and more specifically the negative effects of tax externalities such as tax competition, can be limited through a few simple guidelines (Musgrave 1983:17; Musgrave & Musgrave 1990:290; Dahlby 1996:407; Cnossen 1998)<sup>54</sup>. Tax coordination can therefore hold significant advantages. Tax coordination (see sec 2.6) can, through tax harmonisation, provide the following:

- (1) Adequate *provision* of public services by foreclosing free riding and shirking by the affluent and mobile whilst providing a free flow of business inputs across national boundaries
- (2) Fair *distribution* of the tax burden among residents of each jurisdiction (this is known as

<sup>54</sup> To reiterate, horizontal externalities can be internalised horizontally and vertically but vertical externalities can only be internalised vertically.

- an interpersonal distribution) as well as a fair distribution of shared tax bases, credited taxes, and revenues from it among jurisdictions (intergovernment distribution, also known as tax base entitlement rules, reflects each member's fair share of the total pie
- (3) Unaffected competition, ie neutral taxes (locally) as far as the allocation of resources in the private sector is concerned
  - (4) Diverse fiscal structures consistent with taxpayers' preferences, in line with the system of taxation utilized, but also the expenditures made possible by taxation, and at the same time limited compliance and administrative costs. Otherwise economies of scale should take effect

Uninterrupted tax competition does not always provide the preferred solution. A complex pattern of coordination is rather required (Musgrave 1990:37). The existence of tax coordination, and arguments concerning it, is therefore highly dependent on the context in which it is pursued. Tax coordination can, for instance, depend on the competitiveness of the market in question, and the developmental status of the region involved. Tax harmonisation (including uniformity) therefore stays within the realms of a country's most preferred tax policy followed within specific macro-economic circumstances.

### 3.7 SUMMARY

According to the traditional theory of fiscal federalism, the redistribution and stabilisation function should be conducted at national level while leaving the assignment of the allocation function open. In most federations, the three basic functions of fiscal policy are largely carried out by the national governments but with varying degrees of participation from subnational levels of government. This is because most of the expenditure is related to objectives, ie the provision of public goods, redistribution, and macroeconomic stabilisation that cannot be satisfied adequately by the independent actions of the states or provinces that make up federations. Another reason for the centralisation of taxing powers relates to the economies-of-scale argument, ie cost-efficiency without any duplication of these responsibilities at lower levels of government. This is a disputed argument, however (Tiebout 1956). For this reason the conventional belief is that capital or corporate income taxes are preferred at the central level, questionable at the intermediate level and least suitable at the local level (Musgrave 1983). The same argument exists in terms of commodity taxation, which also relates to the fact that the mobility of the factors of production differs.

A higher degree of integration worldwide could re-emphasise that the taxation of immobile factors of production should be assigned to lower levels of government in order to prevent tax-base flight and thus preserve revenues. The converse could, however, apply where vertical externalities are present. The taxation of immobile factors of production has however limited revenue potential and in many cases has proved difficult to administer whilst agricultural property is often not taxed for political reasons. Property taxation is therefore usually combined with income and sales taxes to provide additional revenue to lower levels of government. In this case, both income and sales tax rates are typically set at a low level so that mobility does not undermine local tax bases.

It was already noted in chapter 2 that there is a difficulty in determining the exact welfare gains or losses from tax competition and, therefore, the emphasis in this chapter is on the debate surrounding the desirability of tax coordination. Correlated to tax coordination, is the existence of tax distortions and suitable tax principles, such as the source and residence principle, concerning capital income taxes; and the origin and destination principle, concerning commodity taxes. In this regard, emphasis fell on the objectives that governments may pursue, eg neutrality (ensuring efficiency) and subsidiarity (ensuring sovereignty and distributional concerns). It seems that, arguments concerning these principles aside, governments tend, in practice, to follow the international tendency to conform to the rules of globalisation<sup>55</sup>. There is a need to renegotiate treaties. This would entail cooperation regarding tax systems and administration, or even replacing these treaties with viable solutions for the taxation of both active (direct investment) and passive (interest and dividends) income. The methods of and need for tax coordination were therefore also discussed in this chapter, with arguments for and against tax coordination. It was concluded that uninterrupted tax competition does not always provide the preferred solution.

A complex pattern of coordination is rather required and highly dependent on the context in which it is pursued. Tax coordination can thus depend on the competitiveness of the market in question, and the developmental status of the region involved. Tax harmonisation (including uniformity) therefore stays within the realms of a country's most preferred tax policy, followed within specific macro-economic circumstances. The above arguments cannot be accepted without further investigation and therefore require a clear understanding of the theory but also

practical circumstances involved. For this reason the next two chapters include an exploration of both tax competition and coordination in practice, as opposed to the theoretical discussions covered thus far.

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55 South Africa exemplifies this belief because the residence principle apply since 2000.

## **CHAPTER 4**

### **AN APPRAISAL OF TAX COMPETITION AND COORDINATION**

#### **EFFORTS IN THE EU**

International considerations are becoming more important for national tax policies, increasing the need for international rules of the game (OECD 2000b:18).

#### **4.1 INTRODUCTION**

Chapters 2 and 3 involved an extensive theoretical analysis of tax competition and coordination with the emphasis on commodity and capital income taxation. Initially the analysis in chapter 2 suggested that tax competition is sub-optimal and wasteful in terms of public goods provision and redistribution specifically. More recently it was suggested that tax competition, with or without the presence of tax coordination, could enhance efficiency, with governments committed to an improved allocation and delivery of scarce resources. The analysis in chapter 3 suggested a renegotiation of the treaties between developed (industrialised) and developing regions, to optimise the outcome of regional integration and therefore, globalisation. A complex pattern of tax coordination will therefore always exist and the specific circumstances will predict the outcome, taking both efficiency and equity into consideration. In this chapter, the theoretical analysis will be extended to include an analysis of these circumstances. The EU will be compared with the largest federations in the industrialised world.

Most literature suggests that a perfect or uninterrupted tax competition is propagated in North American economic unions such as Canada and the US. In contrast, organisations such as the European Communities Commission (EC) and the Organisation for Economic Cooperation and Development (OECD) seem to favour global tax coordination and “fear” tax competition. These organisations therefore attempt to limit the harmful components of tax competition, for instance, tax incentives and tax havens that are thought to be disruptive and wasteful. This wastefulness appears to accord with Europe’s emphasis on social expenditure and the fear that competitive bidding will reduce revenue productivity, which relates to the broadening of tax bases and securing revenue. Deeper integration means increased exposure to the consequences of the removal of barriers to trade and factor movements. Tax harmonisation in the EU could also provide neutrality to members in a process of regional integration.

This chapter firstly attempts to provide a comparative differentiation between a selection of federations and the EU. The more integrated the EU and the rest of the world becomes, the more appropriate experiences in the field of fiscal decentralisation and the effect thereof on macroeconomic stability will become. The second section extends the analysis in terms of commodity taxation, with specific emphasis on tax competition and coordination issues. The third section deals with capital income taxation. The chapter is divided into these sections for specific reasons. Capital income taxation is preceded by commodity taxation because of the chronological order of events in the process of economic integration in the EU. Furthermore, the EU has progressed much further in terms of commodity tax harmonisation than capital income tax harmonisation.

The main purpose of the second and third sections is to provide a clear analysis of the applicable level of tax revenue and thus, the overall tax burden in the presence of tax competition. This statistical analysis should not be interpreted as the “optimal” tax burden of a specific country or group of countries, but rather as an extension of the optimal taxation theory, which does not provide a concise theoretical framework on tax burdens in particular. The static nature of the optimal taxation theory is therefore integrated with the benefits that should thus be derived from the expenditure side of the budget in order to provide tax policy guidance (see also ch 5). The penultimate section draws conclusions and makes recommendations, with the emphasis on the implications of tax competition and coordination, while the last section focuses specifically on a fiscal framework with macroeconomic stability as the ultimate objective.

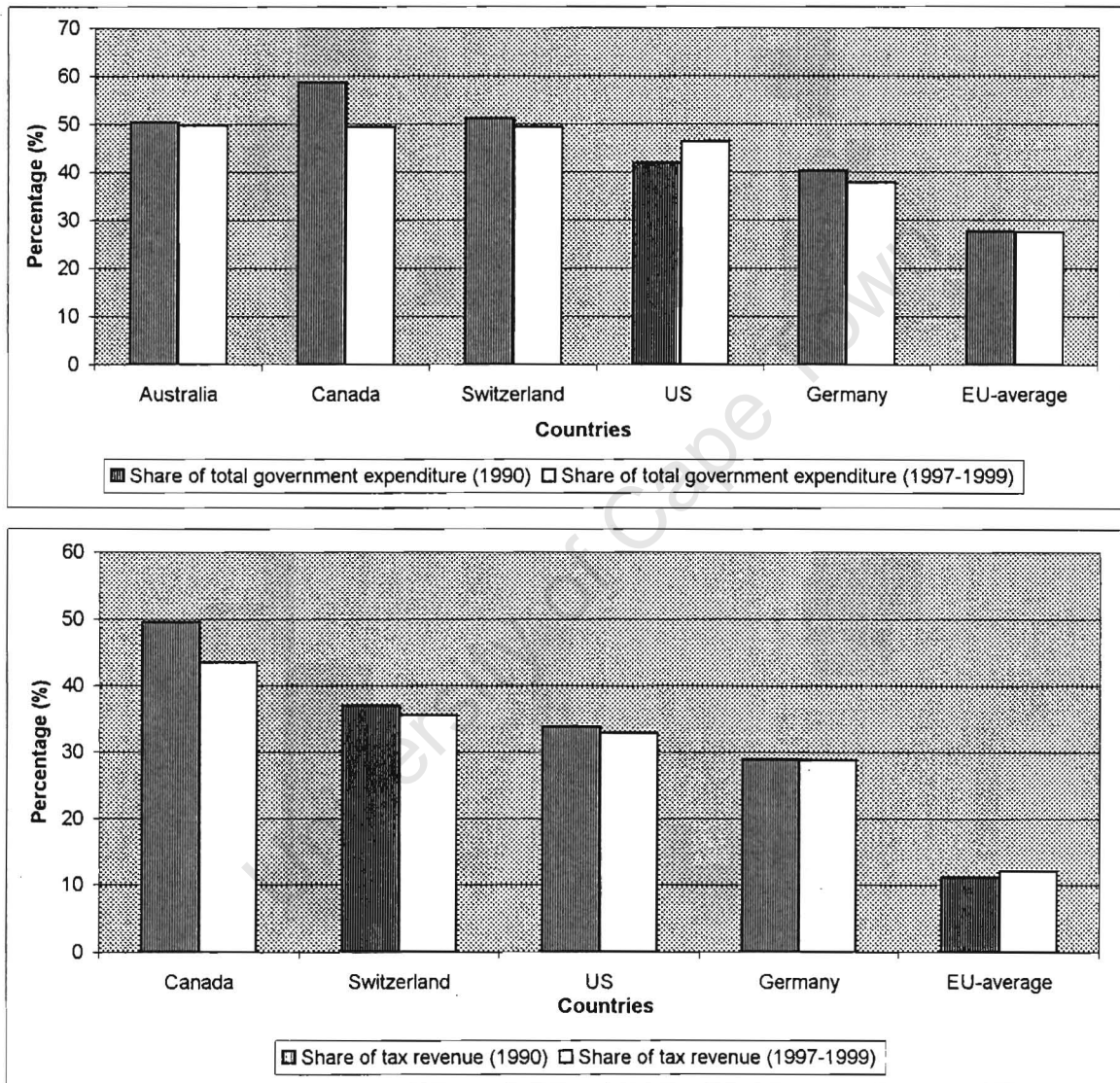
Unless otherwise specified, data and statistical resources in this chapter are drawn mainly from the European Commission (EC), the International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD), PriceWaterhouseCoopers (PwC), and the World Bank (WB). Although data are relatively accessible, up-to-date comparative information is hard to come by in some instances. Hence some of the data had to be adjusted, taking all relevant sources of information into account and in some cases, may differ within a range of two percentage points when compared with only one of the above-mentioned statistical resources.

#### **4.2 FISCAL DECENTRALISATION IN THE FEDERATIONS AND THE EU**

In this chapter, the five largest OECD-federations, namely Australia, Canada, Germany, Switzerland and the US have been specifically chosen to serve as examples. Australia, Canada

and the US have been elected as Anglo-Saxon examples (with varying solutions for intergovernmental finances); and Germany (one of the EU members) and Switzerland as European examples (the other examples are Austria and Belgium). Tax sharing, with the emphasis on neutrality, as well as sovereignty between lower levels of government, plays a predominant role in the European examples.

**Figure 4.1: The composition of subnational shares in selected federations and the EU**



Source: See Table B.1

Before analysing figure 4.1, it should be emphasised that different measures exist for assessing the tax autonomy of subnational levels of government and that the figure only provides a limited picture. Fiscal discretion is greatest when subnational governments are free to determine both the taxable base and the rates of particular tax, without any aggregate limits on revenues, base or



rate enforced by the national government. The opposite is also true when a national government decides on both the tax base and the tax rates collected by subnational governments. Here, there is hardly any fiscal autonomy at the lower level, except perhaps where the subnational level has administrative discretion on how to organise collection procedures (see sec 3.5).

National governments spend, on average, more than half of total expenditures and collect approximately 60% of total revenue in all of the federations. These percentages differ markedly for EU members (excluding Austria, Belgium and Germany) which are mostly unitary in nature, with expenditure and taxation much more centralised. Canada is generally regarded as the most decentralised federation, with Australia on the opposite side of the spectrum, and the other federations in between (see appendix C.2).

For the period 1990 and 1997 to 1999 there was a marked tendency towards revenue decentralisation in Australia, with more expenditure centralisation in Germany and Switzerland, following a trend set during the 1970s. This expenditure centralisation was partly the result of increases in social expenditure in Europe. During the same period, the US showed greater decentralisation in expenditure. This relates to the fact that the federal government reduced the level of implicit and explicit transfers to the states (see appendix C.1). The financing of specifically welfare services changed in that they had to be financed out of a fixed federal grant, supplemented by own funds. Hence states could run welfare as they saw fit, within broad limits. Canada became more centralised in both expenditure and revenue during the 1990s. Another reason for the higher degree of centralisation in expenditures could relate to the seemingly greater importance of agency awareness during the 1990s, compared with public choice. Agency problems occur because of ineffective government at lower levels, whilst the public choice model (sec 2.2) favours a greater degree of decentralisation. Different government levels finance most of their spending functions out of their own taxes and revenue (the principle of fiscal autonomy) with enhanced accountability of subnational governments to their taxpayers and to the centre.

Germany has been more centralised than both Canada and the US, in part reflecting large national government social security systems. Equalisation grants in both Germany and Switzerland are used specifically in terms of horizontal imbalances, reflected in residents' ability to pay for identical goods and services. These grants may assume different forms and can be utilised in a situation of vertical fiscal balance (in the case with Germany and Switzerland) or

imbalance (the Australian example). In the first case, a horizontal distribution formula (Germany) may be utilised, and in the latter, the states have to agree with the national government on a vertically asymmetrical grant scheme. In industrialised countries, two types of transfers dominate conditional transfers to achieve national standards and equalisation transfers, to deal with regional equity.

The German case is unique in that it has a full horizontal redistribution of resources without national government involvement, but with a high level of negotiation between different levels of government (see also sec 3.5.1.3). Spahn (1997) notes that the German system has resulted in a very even regional distribution of infrastructure and a relatively even distribution of regional income. Bird (1999:18) argues that it is by no means clear why either national or subnational governments in federal countries with strong regions would choose a system of tax sharing. Weaker regions (those most dependent on national transfers) in these countries might, however, prefer such transfers to the right to tax a base that they do not really have. Asymmetrical regional tax systems, such as those in Canada, might become a more prominent feature in some countries. Interpersonal distribution within regions rather than interregional distribution is therefore emphasised.

Experience in the selected federations suggests that successful decentralisation cannot occur in the absence of well-designed fiscal transfer programmes. The design of transfers must be simple, transparent and consistent with their objectives. Properly structured transfers can enhance competition for the supply of public services, accountability of the fiscal system and fiscal coordination, just as general revenue sharing has the potential to undermine it. The role of fiscal transfers in enhancing competition for the supply of public services should not be overlooked. Transfers for basic health and primary education could be made available to both the public and nonprofit private sectors on an equal basis, using as criteria the demographics of the population served, school age population and student enrolments, et cetera. This could promote competition and innovation, as both public and private institutions compete for public funding (Shah 1999:49).

In contrast to the federations, the EU utilises unconditional grants and shares VAT revenues to finance the budget. The EU employs specific-purpose grants, predominantly of the matching type, so that local projects are jointly financed with national (and regional) governments. There is also a clear-cut tendency to support local investment projects as a means to foster social

cohesion. The size of the EU budget is relatively small in line with the subsidiary principle. In 1997, it was slightly less than 1,2% of the combined GNP of its members and only 2,5% of their combined public spending. Total own resources utilised by the EU are limited by a ceiling, which is fixed as a percentage of total GNP. This ceiling was raised progressively from 1,2% in 1994 to 1,27% in 1999. For the period 2000 to 2006, the financial perspectives outlined in Agenda 2000 aim at financing the development of EU activities and the accession of a number of countries from Central and Eastern Europe, while keeping constant the available resources as a share of the European GNP (appendix D.1).

Most of the EU budget has a clear interregional redistributive function. Approximately half is spent on the CAP, and one-third on the structural funds. Expenditures on internal policies, particularly research, education and transportation, reached 6% in 1997, whereas spending on external actions and administration amounted to 7% and 5% respectively. The EU budget is financed via a tax-sharing arrangement with members, that is vertical tax sharing. Tax sharing in the EU between members is therefore nonexistent. Contrary to most federations and unitary states, the EU displays a negative fiscal gap. The revenues raised by the higher level of government are insufficient to cover its expenditures, resulting in the need for bottom-up funding. The only real EU levies or the so-called “own resources” are the customs levies and duties, and the levies within the framework of the CAP (including sugar levies). Although they are specified as “own resources”, these revenues refer to all EU revenues including bottom-up funding by members. The remainder is provided for by a share in member states' VAT revenues, and by a GNP-based contribution by member states (appendices D.2 and D.3).

In short, the EU has been given no power to tax, in the sense of exclusive taxes. It does, however have a “constitution” in the form of the Treaty of Rome (1958) as amended by the Single European Act (1986). In this regard, one of the sections of this “constitution” can read as follows in future: “The Union shall not levy taxes” (The Economist 2000b). This could mean that any transfer of power to tax would require not only unanimity among governments about treaty changes, but also a constitutional amendment that also demands the direct endorsement of citizens through referendums (as in the case of Switzerland with its direct democracy). One could, however, argue that VAT is a tax that is shared in the EU.

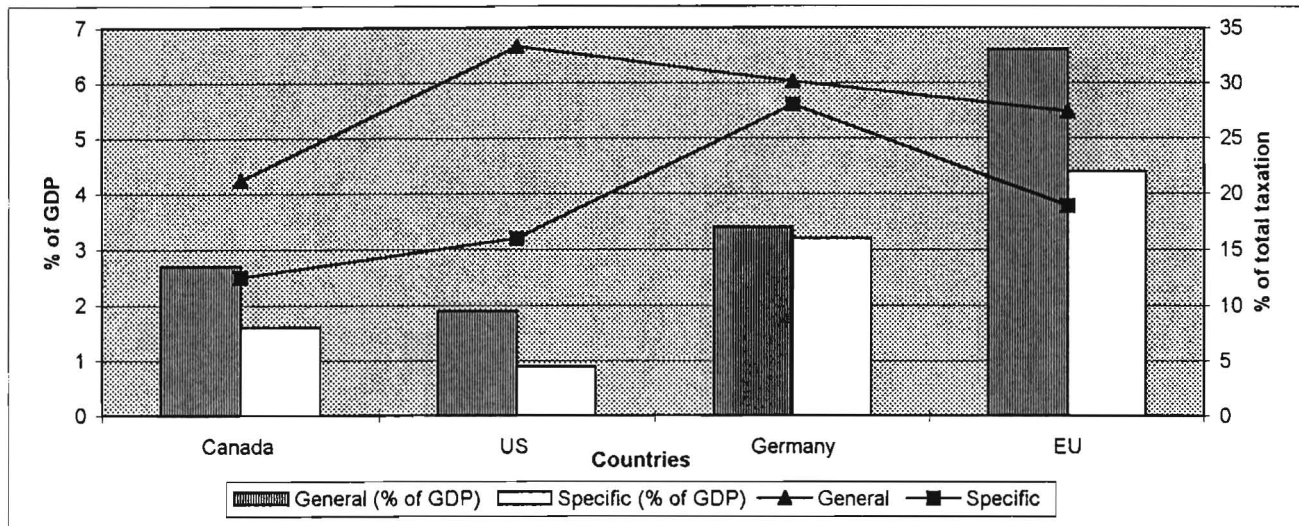
The share of the EU in a member state's VAT revenues is 1% (the so-called “call-up rate”) of the harmonised VAT base in that country. By taking the (harmonised) base as a basis, one gets

around differences in VAT rates. Effectively there is the EU VAT with a rate of 1%. The national VAT base is, however, only relevant up to 50% of the GNP. By using a 50% GNP ceiling, countries that rely heavily on the VAT are spared. Instead of the VAT being a shared tax, its revenues are shared and the EU, unlike its members, has no autonomous right to unilaterally change its VAT rate.

The following discussions on commodity taxation and capital income taxation will focus on tax competition and coordination. Issues such as efficiency (tax neutrality) and equity (distribution) in tax systems, as discussed in chapters 2 and 3 will be further examined and tested in practice. The focus falls on the EU experience, with reference to the relevant federations. Australia is excluded from sections 4.3 and 4.4 because commodity and corporate taxes are mostly assigned to the national level (see appendix C.2). For the same reason, Switzerland is excluded from section 4.3 but included in section 4.4 because income taxes are quite prominent at subnational level in that country.

### **4.3 COMMODITY TAXATION**

Figure 4.2 provides the main differences in terms of commodity taxation between the EU-members and non-EU federations in question. Commodity taxation includes inter alia general sales taxes (including VAT) and specific taxes on goods and services (including excise taxes). Overall, general consumption taxes (especially VAT) in OECD countries have produced 18% of total tax revenue, compared with only 12% in the mid-1960s (OECD 1998). This could be because of the growing difficulty in taxing mobile capital worldwide. In comparison, the share of specific consumption taxes such as excises and import duties, halved from 1965 to 1996. This reflects the global trend to remove trade barriers.

**Figure 4.2: Commodity tax revenue, 1998**

Source: See Table B.2.

Subnational tax revenues can also be investigated for the federations and the EU. In general, the commodity and total tax burdens, as well as the share of commodity tax revenues in total taxes at national level in EU member states, are relatively high compared with those at subnational level in Canada and the US. The main difference is that the EU makes use of a multi-stage (broad-based) tax, VAT, instead of the one-stage retail sales tax (RST) levied in the US. A broad-based VAT system (known as GST) is used in Canada at federal level, in conjunction with other sales taxes (RST and HST) at provincial level (similar to a tax-sharing approach). In the multi-stage VAT it is possible to levy a much higher rate compared with a sales tax that is collected only in one stage.

Commodity taxes as a percentage of total taxation in Canadian provinces and US states (33,7% and 49,3% respectively) are generally in line with those at central levels in the EU (an average of 40,4%). Tax revenues from commodity taxes (VAT specifically) were originally seen as being a more important revenue source for European countries at subnational levels, with the exception of Switzerland where indirect taxes are centralised, compared with North American countries such as Canada and the US. This tendency is also evident from figure 4.2 (see table B.2) which compares the tax burdens, that is taxes as a percentage of GDP. The commodity tax burden (commodity taxes as a percentage of the GDP) remained low in both Canada and the US (4,3 and 2,8% of the GDP respectively), whereas that of Germany (at the central level) was much higher at 6,6% of the GDP. Obviously, these tax burdens are still much lower than those of other EU members at the central level with an average of 11% of the GDP. To fully appreciate the

differences between EU members and non-EU federations, the discussion has to be linked to historical developments.

#### **4.3.1 Historical developments**

The process of regional integration in Europe dates back to 1951 with the signing of the European Coal and Steel Community Treaty (ECSC) in Paris. Signatories to this treaty included Belgium, France, Germany, Italy, Luxembourg and the Netherlands. In terms of Article 67 of the ECSC Treaty, a supranational High Authority was empowered to take measures against all obstacles to free trade in the coal and steel sectors. The signing of the European Economic Community Treaty (EEC) followed and came into force from 1958 with the original signatories to the ECSC. This was the first treaty to address fiscal measures such as the principles applicable in commodity taxation, and it assigned the EC the task, in consultation with member states, of eliminating distortions in competition.

In 1968 internal custom duties were abolished in the EEC, and a common external tariff was introduced. This tariff was a slightly lower than the weighted average of members' tariffs. Consequently, a VAT was introduced with a largely uniform tax base based on the destination principle (invoice or tax credit method) with border tax adjustments. In border tax adjustments, the exporter or seller of the product is "detaxed" upon export. A zero rate is applied and the exporter can reclaim previously paid VAT in the importing country. Upon import or purchase in the importing country, the going VAT rate is applied, and VAT is paid to the importer's government, where VAT is also reclaimed after retail sale. Provision is therefore made for tax neutrality, even if VAT rates vary among member states. The Commission's earlier efforts were therefore mostly in the field of commodity taxation, where a more or less uniform VAT base and aligned VAT rates were established.

The harmonisation of national tax bases for VAT was initiated by the 1970 decision of the European Council to provide the EEC with its own resources, rather than rely on financial contributions by individual member states. Apart from agricultural levies and tariff revenues, the main source of the European Community's revenues was to be a fixed percentage of the VAT tax base in each member country. The Sixth VAT Directive (EC 1977) proposed a largely common basis of assessing VAT and was approved by the Council in 1977. This has been implemented by all member states since 1979. Minor differences in the VAT bases continued to exist, but

were no longer of broad economic concern (Haufler 1993). The harmonisation of commodity taxation is thus justified by the requirements of a single market (the unrestricted movement of goods and services), and by the opportunities that uniform national commodity taxes offer through “piggy-backing” by the supranational government.

In 1985, the EC published approximately 300 recommendations in the form of a White Paper on the completion of the internal or single market. These recommendations focused mainly on the removal of physical, technical and fiscal barriers and were included in the Single European Act of 1986<sup>56</sup>. The preservation of internal common markets is also prevalent in most mature federations. The constitutions of mature federations typically provide a free trade clause (as in Australia, Canada and Switzerland); federal regulatory power over interstate commerce (as in Australia, Canada, Germany, Switzerland and the US); and individual mobility rights (as in most federations).

The creation of a single, common market within the ECC entailed the abolishment of border tax adjustments, which meant that every product in each member state was always taxed at the rate that was levied at the retail stage in that member state (destination principle), regardless of the exporting member's VAT. All other taxable trading channels were, however, not affected by the abolishment of border tax adjustments. With the abolishment of border tax adjustments, the EC had to deal with the consequences. Subsequently, direct consumer purchases became a reality, because restrictions on the importation of goods for personal use were lifted. With these purchases, the destination principle (the collection of taxes through invoices) would become ineffective and elements of the origin principle would apply<sup>57</sup>. In the absence of tax rate uniformity, massive flows of cross-border purchases in low-tax countries had to be dealt with. Fitzgerald, Quinn, Whelan and Williams (1988) estimated that the 1986 value of cross-border purchases in Northern Ireland by residents of the Republic of Ireland was about 2,2% of the total Irish imports in that year. Similarly, the 1985 purchases of Danish residents in Germany were valued at about 1,6% of total Danish imports in 1985 (Bygvra, Hansen, Restad & Soloft 1987).

56 This Act included the original signatories plus Britain, Denmark, Greece, Ireland, Portugal and Spain. It made provision for the extension of qualified majority voting and the abolishment of the last internal frontiers that is the establishment of the SEM from 1993. Border tax adjustments could no longer be used.

57 Under the origin principle, indirect taxes are producer rather than consumer taxes and there is a tendency to equate gross commodity prices.



#### 4.3.2 The importance of commodity taxation and coordination arrangements

Table 4.1 indicates the number and level of VAT rates of EEC members in 1987 (before members started adjusting VAT rates), compared with those in 1999. In 1990, for instance, Luxembourg (12%) undercut its neighbours, Belgium (19%), France (18,6%) and Germany (14%). The tax differentials between EU members meant that high-tax members (Belgium, France and Germany) lost part of their tax bases to low tax members (Luxembourg). As explained in chapter 2, undercutting countries normally do not take into account the negative effect on their partners' revenues when deciding their tax rates. These negative externalities can push countries into strategic responses, lowering tax rates to levels below the desired ones. Competition between members would not lead to an optimal outcome because the Nash equilibrium of the tax rate setting game would correspond to a welfare level inferior to that attainable if countries behaved in cooperatively. Smaller countries wishing to impose higher rates than their neighbours might find it difficult, say, in accordance with the EU average VAT rate (sec 2.4).

While minimum rates for VAT and excise taxes now exist in the EU, there are still differences across member countries. Reduced rates vary widely and are generally applicable to the farming (including foodstuffs), medical, pharmaceutical and transport (including fuel and energy) industries. Standard VAT rates vary from 15% to 25%, although the inclusion of excise taxes pushes the rates even higher. Members with high VAT rates could lose considerable revenue with a decrease to the average level of about 18%.

The importance of tax differentials as trade barriers in the EU can also be investigated. A survey on the relevance of barriers in the EEC was conducted among 2000 firms (EC 1988). Entrepreneurs ranked (value added) tax differentials fifth. The four most important barriers were technical standards and regulations, administrative barriers, frontier formalities and freight transport regulations. Destination-based VAT rate differences, as well as differences in excise duties, were, however, linked to the presence of frontier formalities. In fact, entrepreneurs considered them to be one of the main reasons for the existence of customs formalities. The cost of tax rate differentials can therefore be directly inferred from the cost of customs formalities borne on intra-Community trade (see further studies on freight haulers in EC 1999). These differences can also be observed in federations such as Canada and the US which are also members of NAFTA. In Canada, a general sales tax (GST) that operates as a broad-based VAT



is levied, while in the US, a federal excise tax (FET) is levied on cross-border freight haulers. Problems occur because credits are given on the FET but not the GST, and double taxation as a major cost item occurs (Prokop & Dean 1999).

In 1991, it was decided that each member state should operate one standard VAT rate and two, but preferably one, reduced rates. Existing zero rates are tolerated but the introduction of new zero rates is not allowed. Minimum VAT rates were set at 15% for the standard rate, and 5% for the reduced rate. In order to preserve the destination principle without border controls, the EC proposed the clearing house system, which would ultimately operate on the same basis as the destination principle. Under this system, sales among the EEC members would be treated in the same way as those within national borders. Exporting firms would no longer obtain a tax rebate and importing firms could reclaim the foreign VAT incorporated in the price of the imported good from the exporting country revenue office, and pay the home VAT. Importers would therefore receive the tax credits from the importing state, and at the end of the tax period, accounts would be balanced off and the exporting state would compensate the importing state for any net credit balances through the clearing mechanism (EC 1987). Special measures were also proposed for removing border or frontier controls in respect of major excises. However, the proposed VAT clearing house system has not yet been introduced. The system cannot maintain the pure destination principle, and an overarching fiscal authority is needed. Although the clearing house system is simple, doubts about the accuracy of the claims involved with such large flows of money could also give rise to problems.

The EU could only agree on a transitional arrangement (from 1 January 1993 to 31 December 1996) in which the status quo was largely retained (ie the destination principle, without the need for clearing arrangements). The destination principle was therefore made compatible with the removal of border controls, since the border tax adjustment procedure was shifted into the books of firms (with some special provisions, such as cross-border mail order sales, second-hand commodities and art and antiques). Under the transitional system "importation" is replaced by "acquisition" as the taxable event, with a general exemption in the country of origin, if the acquirer is subject to VAT in another member state.

**Table 4.1: VAT-rates of EU members and federations for 1987 and 1999**

MEMBERS	REDUCED RATE (S)		STANDARD RATE		INCREASED RATE (S)	
	1987	1999	1987	1999	1987	1999
Canada	---	---	7	7	---	15 (HST)
US	---	0	---	3-8 (RST)	---	---
Switzerland <sup>1</sup>	---	2,3 & 3,5		7.5	---	N/A
Austria <sup>2</sup>	---	10	---	20	---	N/A
Belgium	1; 6 & 17	6 & 12	19	21	25 & 33	N/A
Denmark	N/A	N/A	22	25	N/A	N/A
Finland	---	8 & 17	---	22	---	N/A
France	2,1; 4; 5.5 & 7	2,1 & 5,5	18,6	19,6	28 & 33,3	N/A
Germany	7	7	14	16	N/A	N/A
Greece	6	4 & 8	18	18	36	N/A
Ireland	0; 2,4 & 10	4,2 & 12,5	25	21	N/A	N/A
Italy	2 & 9	4 & 10	18	20	38	N/A
Luxembourg	3 & 6	3; 6 & 12	12	15	N/A	N/A
The Netherlands <sup>1</sup>	6	6	20	17.5	N/A	N/A
Portugal	0 & 8	5 & 12	16	17	30	N/A
Spain	6	4 & 7	12	16	33	N/A
Sweden	---	6 & 12	---	25	---	N/A
UK	N/A	5	15	17,5	N/A	N/A

Notes: 1. In 2000 the standard rate would have changed to 7,6% and 19% in Switzerland and the Netherlands respectively.  
2. Starting with Austria, tax rates in the EU are those applicable at central or national level for different members.

Source: EC (1988); PWC (1999a).

Fehr, Rosenberg & Wiegard (1995) argue that, under the clearing house system, an increase in the welfare of low-tax members and a decrease of high-tax members could have occurred. This relates back to the application of the destination principle. As a consequence of the increase in

the tax rate spread after the removal of border tax adjustments, welfare decreased for the EU as a whole. Under the transitional system, the results show that efficiency losses or gains for the single countries may be slight and are dominated by international redistribution effects.

The Canadian experience provides useful insights (table 4.1). The principal difference between the Canadian system and the EU is that in Canada there is an overriding federal General Sales Tax (GST) as an enforcement mechanism. Quebec has an incentive to monitor the Quebec Sales Tax (QST). GST is monitored simultaneously, responding to audit requirements with a cross-check from federal government, to ensure that the QST has not been evaded. Again, the emphasis is on consent, cooperation and harmonisation. Canada is probably one of the most intricate and interesting case studies. The country has several distinct sales tax systems.

In Canada, a federal VAT, the Goods and Services Tax (GST), applies throughout the country at a rate of 7%. This tax is on most taxable goods and services consumed in the country. In one province (Alberta), the GST is the only sales tax. In four provinces, in addition to the GST, there is a separate Retail Sales Tax (RST) applied to the GST-exclusive tax base. In one small province (Prince Edward Island), the provincial RST is applied to the GST-inclusive tax base. The RST differs from 5 to 12% in the different provinces. In three other small provinces (Newfoundland, Nova Scotia and New Brunswick) there is a joint federal-provincial VAT called the Harmonised Sales Tax (HST), harmonised on the tax basis and administered by the federal government at a uniform rate of 15%, that is 7% federal and 8% provincial<sup>58</sup>. Finally, in one province (Quebec) there is a provincial VAT, the Quebec Sales Tax (QST), applied to the GST-inclusive tax base and at a rate of 7,5%. The combined rate is thus 15,025% and is administered by the provincial government, which also administers the GST in the province on behalf of the federal government.

Both the QST and GST are broad-based taxes on consumption. Interprovincial sales from one corporation to another are basically handled by a deferred payment system similar to that now applied in the EU's alleged "transitional" regime. As in the case of any other destination principle, exports from Quebec are zero rated. Imports are thus taxable, but when there is a sale by a registered trader to an unregistered trader (consumer) in the province, taxes are assessed

58 This tax was introduced in 1997 as part of the federal government's effort to develop a more uniform national sales tax system. The HST revenue is shared on the basis of province-specific consumption patterns, with allocation formulae developed jointly by the federal government and the provinces, similar to tax sharing in Germany. Interprovincial trade is handled in the same way as in Quebec.

only on interprovincial imports. Although special rules apply to automobiles and a few other cases, in general there is no attempt to collect tax on interprovincial purchases made directly by final consumers. The Canadian commodity tax system shows similarities with the so-called “comprehensive VAT (CVAT)” where both the national and subnational governments are involved in the levying of VAT (Bird 1999).

Information sharing is emphasised in the Canadian experience, and even more so in the US, where a destination-based sales tax (RST) is collected only at regional level. At present, the US is the only country to levy an RST in this way. A system of independent VATs, similar to the one now present in the EU, can also be used. The main difference here is that a much higher level of information sharing exists between the revenue authorities of the different states in the US, compared with the different member countries in the EU. The RST is collected only at one stage, and hence, in contrast to a multi-stage VAT, it is difficult to levy high rates. The RSTs are kept low in the different states and levied at final consumption, and therefore do not distort production costs or trade across countries, or even across states, as in the case of the origin principle. Production efficiency is thus achieved, which is a condition for neutrality. Forty-five states, as well as the District of Columbia have RSTs with rates that vary from 3 to 8% (5% average in 1998). Slightly over half the states exempt food from tax, and virtually all exempt prescription drugs. In about half the states, municipalities and countries levy their own RSTs<sup>59</sup>.

An alternative to the Canadian and US examples is to levy sales taxes only at national level. Germany has a single VAT levied at national level, although a proportion of VAT revenue is shared on a formula basis with the states (see sec 3.5). This approach has, for instance, also been proposed for developing countries such as Brazil and the EU. The approach is technically feasible, and appears to have substantial advantages in terms of administrative and compliance costs. Bird (1999), however, argues that tax sharing is in effect a form of intergovernmental fiscal transfer, with the total to be transferred determined by the designated share of VAT collections, and the amount allocated to each state determined by a central formula. Such revenues are not really subnational taxes. As mentioned earlier, in federal countries with strong

59 Various studies have been conducted on the effect of sales taxes on the location of retail sales (Mikesell 1970; Fisher 1980; Fox 1986; Gentry & Hubbard 1997; Feenberg, Mitrusi & Poterba 1997). Most of these results conclude that an increase in the RST will reduce retail sales and consequently tax revenue but with differing degrees. Other examples also exist where states such as California eliminated sales tax because of a fear of lost revenue and consequently an effect on employment (see *The Economist* 1993:24). The influence of excise taxes on cross-border sales seems to be more pronounced (KPMG 1993). In this regard, the loss for high-tax jurisdictions may be fairly substantial because of cross-border shopping as well as smuggling of cigarettes to higher-taxed jurisdictions. This has happened in numerous cases, also between Canada and the US. In recent years, Canada has attempted to increase cigarette taxes, both to penalise people for harm done to the environment but also to discourage smokers from smoking. Smokers engaged in cross-border shopping in bordering US areas where cigarettes were relatively cheap. The federal government in the US collected higher taxes on tobacco, alcohol and some jewellery. There is evidence of the same kind of activity in countries bordering on the EU.

regions it is by no means obvious why either the national or the subnational governments would be willing to accept such a system. The weaker regions might, however, prefer such transfers to the right to tax a base that they do not really have. In terms of fiscal accountability, the Canadian asymmetrical regional tax systems might be preferable.

In summary, the Canadian experience shows that apart from conventional wisdom, it is possible to implement a destination principle without any clearing mechanism. It is argued that although the pure destination principle is technically feasible, the system of interstate crediting would be costly and difficult to apply and would require a high degree of mutual trust between governments. In 1996 a new VAT, based on the origin principle was proposed (see EC 1996:328). These proposals involve the use of a reallocation mechanism for VAT revenues, similar to the clearing arrangement, based on the national accounts (not the books of firms). The adoption of a more uniform application of VAT rules, and a narrow band for rates, or even a single rate, is also included in the proposals. However, administrative difficulties are generally associated with switches and the accuracy of large flows of money through the clearing of national accounts might still be questionable (Haufler 1993). Such a switch may become necessary as the world becomes more integrated, with the origin principle as the internationally acceptable norm (although this is unlikely at this stage).

The transitional VAT system (effective as from 1993) is still in use until a new system comes into force. To recap, under the transitional system, border tax adjustments are shifted into the books of firms (with some special provisions for, say, direct consumer purchases). In 2000, negotiations again failed in reaching a common system of VAT, based on harmonised rates and structures through the application of the origin principle - the original Neumark (1963) proposal, in the EU. The internal market and tax commissioner, Fritz Bolkestein, has stepped up the pressure by suggesting a new strategy to deal pragmatically with the shortcomings of the existing VAT system. The "impression" of fiscal sovereignty or subsidiarity for members is therefore created because harmonised VAT rates are already present<sup>60</sup>. Although committed to an origin-based system, short-term improvements in the present destination-based system are also in the pipeline.

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60 The Fiscalis programme (see 98/888/EC; 98/467/EC and 1998/532/EC) is a Community action programme to improve the functioning of indirect taxation systems of the internal market (see EC 2000 for a full summary of all documentation on VAT and excise duties).

### 4.3.3 Future prospects

There are a number of reasons for the EU's indecisiveness in choosing an acceptable VAT system for all members. Firstly, the proposed origin principle with harmonised rates would broaden the tax base, that is consumption and investment goods would be taxed, and an equitable distribution of revenues could be achieved through the proposed reallocation mechanism (clearing of national accounts). This type of clearing arrangement does, however, require accuracy and mutual trust between member countries. Although this accuracy does seem to be present in the EU, the enlargement of the EU with developing and transitional economies (sec 4.5.2) casts doubt on the tax administrations of these economies.

Secondly, the nature of VAT is important. As pointed out in chapter 3, border controls are normally a serious impediment to the movement of trade within a federation or common market, and the origin principle with harmonised rates (export tax) would therefore not interfere with this movement and would ensure an equitable distribution of revenues. However, if the origin principle, is not levied at the same rate in all jurisdictions, this creates problems (sec 2.4). There are incentives to locate production in low-tax jurisdictions (see sec 3.5.1.1 for details of the Brazilian experience). The absence of border controls is therefore even more stringent in the application of the origin principle with nonuniform rates than in the application of the destination principle. According to the destination principle, the VAT collected at the border is offset against liability for tax on sales (exports) and is thus relatively unimportant. Under the origin principle, however, tax avoided at the border is not recouped. Although rates and bases are largely harmonised with minimum rates in the EU, an enlargement of the EU could again create problems (see sec 4.5.2).

While there are minimum rates for VAT and excise taxes exist in the EU, there are still differences across member countries (table 4.1). Reduced rates vary widely and are generally applied to farming (including foodstuffs), medical, pharmaceutical and transport (including fuel and energy) industries. Standard VAT-rates vary from 15% in Luxembourg to 25% in Denmark and Sweden although the inclusion of excise taxes pushes the rates even higher. Estimates show that the average VAT and excise tax rates increase to 33,1 and 21,1% in Denmark and Germany respectively. For members with a high VAT rate, for instance Denmark and Sweden (25%) and Finland (22%), a decrease to the average level of approximately 18% would lead to a loss in revenue. In Finland alone, a one percentage point reduction corresponds to tax revenue of more

than 2,5 billion Finnish marks (Andersson 1999).

The above-mentioned countries normally have little room for lowering taxes and also covering these reductions by raising other taxes. As earlier mentioned, welfare systems and thus state expenditure programmes, are placed in jeopardy. Furthermore, the elasticities of demand have long played a role in cross-border shopping. Sharf (1999) argues that the transaction size, be it for necessities or luxuries, should be used as guide for tax design. This means, that in the presence of cross-border shopping, the existence of scale economies in the quantities purchased means that the smaller the optimal transaction size is, the larger the optimal tax mix will be (see sec 2.4). If individual transactions for a certain commodity are large, then the commodity should be taxed relatively lightly, whereas if it is purchased more frequently and in smaller amounts, it should be taxed more heavily. Evidence suggests that considerable cross-border shopping exists between Denmark and Sweden for certain kinds of perishable food items such as cured meats, which can be accounted for by the relative ease with which these types of foods can be stored. The conventional distribution argument that goods should be taxed according to their elasticity, that is a low VAT on necessities and a high VAT on luxuries, is immediately withdrawn.

Another issue of concern in the EU, as in other parts of the world, is electronic commerce. This relates directly to problems incurred in the VAT system in the EU. An ongoing global debate on how electronic transactions should be taxed, has unfolded. The OECD (1997) has released a paper in which the challenges posed for tax systems by the Internet and Global Electronic Commerce are outlined. The relevant features of the Internet for tax policy and tax administrations are examined with particular emphasis on the impact of these features on consumption taxes, income taxes and international taxation arrangements (particularly in the areas of tax treaties and transfer pricing) with ultimate recommendations for member governments of the OECD. Within this framework, the ECs proposals on this issue have been received with reluctance<sup>61</sup>.

Online retailers within the EU are supposed to collect VAT, a consumption tax, according to the destination principle. Although VAT rates vary among members of the EU, the destination principle is supposed to prevent online firms from setting up in whichever EU member has the lowest VAT rate on its product, and exporting to countries with higher rates. The enforcement of this policy, however, is questionable. Information sharing between retailers and the government

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61 See The Economist (2000:11); World Trade (2000).

on the receiving side is obviously a problem when the destination principle is used. The issue at hand here, is that online consumers do not need to be residents of any country. Countries such as Canada are already looking into issues such as changing source rules to cope with this problem (Li 1999). Sinn (1990b) argues that consumers will belong to the so-called “winning group” in the EU because this group can escape the domestic VAT by buying foreign products, or by simply purchasing domestic products through foreign retailers. This is facilitated by a fast-growing e-commerce industry.

Harmonisation in the EU has come a long way in terms of a harmonised VAT base, and to some extent harmonised VAT rates. The main intention seems to be to strike a balance between the objectives of taxation, that is neutrality through the destination principle and equity through the clearing mechanism. Haufler (1993) argues that the transitional system (which compares well with the restricted destination principle) ought to be preferable to the restricted origin principle if compensating transfers to high-tax member states are to be avoided in the EU, and if incentives for national governments to engage in a process of competitive undercutting are to be reduced. This is mainly because the redistribution of tax revenues from high-tax to low-tax regions would be significantly higher under the restricted origin principle, because the tax base effects extend to a large category of intermediate (investment) goods. Although the destination principle within the EU provides the necessary tax neutrality (efficiency) and equity that the EU members seem to need, it can be rather complex and entails extensive information sharing which is not always forthcoming between these governments. This reiterates the argument that the origin principle with harmonised VAT rates is preferable within the EU.

Sinn (1987 & 1990b) argues that if the origin principle is applied, regardless of whether the residence and true economic depreciation, or the source principle and immediate depreciation (see sec 3.5) prevail, the corporate income tax will enjoy robust neutrality. However, VAT still has to be harmonised. At this stage, however, it seems unrealistic that the EU will adopt the new origin-based VAT with national accounts clearing, especially because there are still uncertainties about new members wishing to join the EU. The Canadian experience, however, shows that the destination principle is possible without any clearing mechanism, despite the existence of an overriding federal enforcement mechanism. This means that the supra-national authority in the EU would have to be given this power and national sovereignty would have to be sacrificed. In the next section, the emphasis will shift to capital income taxation. Again the focus falls on the EU (including Germany as one of the members) with relevant federations, namely Canada,



Switzerland and the US. Australia is excluded because corporate taxation is centralised. These federations show similarities in the assignment of their capital income taxes and, more specifically, in the allocation of this income amongst the different levels of government (apportionment).

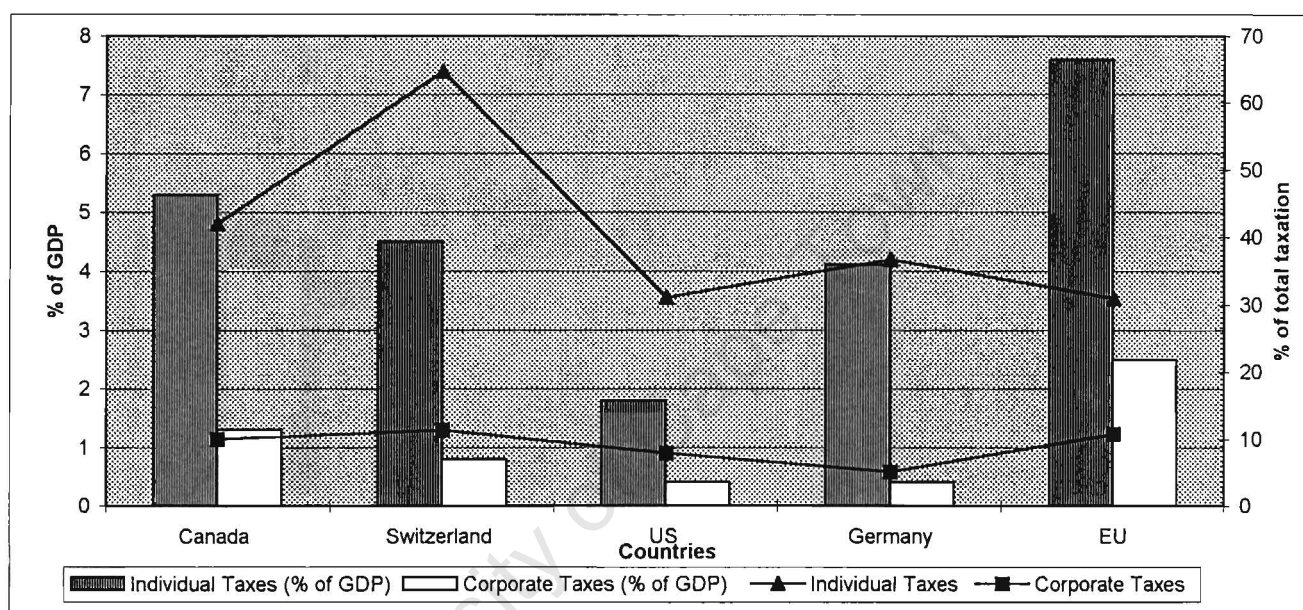
#### 4.4 CAPITAL INCOME TAXATION

In terms of capital income taxation, the corporate and total tax burdens, as well as the share of corporate tax revenues in total taxes at the national (central) level in EU member countries are relatively high, compared with those at the subnational level in Canada and the US (fig 4.3). The most notable exceptions to this rule are Germany and Switzerland. In Germany, the corporate and total tax burdens at national level are lower than the burdens at the subnational level in Switzerland and Canada respectively. In Germany, the states also levy a considerable amount of corporate tax. Switzerland tends to be unique, in that individual income taxes as a percentage of total taxation at subnational level, are much higher at 64,7%, than in any of the other cases. The reliance of subnational governments on individual income taxes compared with other taxes is higher than that of national (central) governments in most EU member countries. The existence of national corporate (and personal) income taxes, and the associated exchange of tax information between national and subnational tax authorities, facilitates the implementation of the destination/residence principle (and thus the achievement of CEN) within the selected federations. By contrast, the lack of exchange of information between EU members makes the enforcement, as in the case of commodity taxes, more difficult.

A few interesting observations can be made on closer examination of figure 4.3, with cross-references to other figures and tables. In all cases of the selected federations and the rest of the EU members, the individual income tax burden is significantly larger than the corporate tax burden. There are a number of reasons for this phenomenon. Firstly, the reason for this relate to the level of development in these countries. The level of development normally determines the size of the tax base, but also has an effect on a country's capacity to administer taxes. Furthermore, taxpayers in developed countries are more sophisticated and levying complex taxes are possible, thereby broadening the tax base even further. Secondly, individual income tax burdens tend to remain high, especially in the case of the EU members, and this could relate to the very nature of capital income tax systems. In the US, for instance, where a classical system (under the residence principle) is in use, the corporate and income tax burdens are much lower

and a much higher degree of convergence can be observed between these taxes, than in any of the other cases. This could also tie in with the fact that the overall average tax levels in the US have been lower than its neighbour Canada or the EU during the past 20 years. The tax burden on capital and labour, say, in Canada, has been high by international standards, especially in relation to the US (see table 4.4). The average taxation levels (rates) on capital and labour in Canada have tended to increase in the past 15 years, especially during the 1990s, outpacing the increase in average tax levels on capital and labour in the US and the EU (OECD 2000b).

**Figure 4.3: Capital income tax revenue, 1998/99**



**Source:** See Table B.3

In Canada the average tax levels on capital changed from approximately 30% during 1980 to 1985 to almost 38% during 1991 to 1997, and those on labour changed from approximately 23% during 1980 to 1985 to almost 29% during 1991 to 1997. During the same periods, the average tax levels for the US and the EU on capital, changed respectively from approximately 27 to 29% and from approximately 23 to 24% respectively. For labour, it changed from approximately 22 to 23% for the US, and for the EU, from approximately 33 to almost 37% (OECD 2000b). In addition, Canada's marginal income tax rates on personal income have been significantly higher, especially at the middle-income bracket, while the burden of corporate income taxes has not only been high, compared with the US, but has also tended to penalise "new technology" sectors (see table 4.4).

However, the measures introduced in the Budget Plan 2000, and the October 2000 Economic and Budget Update (Canada 2000) (specifically the reductions in personal and corporate income taxes, as well as capital gains taxes) are expected to reduce the distortions embedded in the Canadian tax regime, and to improve the attractiveness of business operations and new investments in Canada (see table 4.4). With the dawn of a new millennium, Canada like various other countries (see table 4.3), started with major tax reform efforts. Tax reform efforts during the 1980s and 1990s (see Messere 1993) and now during the 2000s, seem to be another reason for the larger individual income tax burdens as shown in figure 4.3. Lower corporate tax rates are normally levied in order to compete for foreign investment, and a large divergence between the individual income tax and corporate tax burdens will still be prevalent, especially in the case of nonreforming EU members with smaller divergences, normally in the case of EU federations.

Lastly, a comparison between figures 4.2 and 4.3 could provide another possible explanation for the lower corporate tax burdens. As pointed out earlier in this chapter, this tendency seems to relate to the *prima facie* shift in tax burdens away from corporate tax burdens (internationally mobile tax bases) to commodity tax burdens (the less mobile tax bases). The fastest-growing revenue sources have been general consumption taxes and contributions to finance social security, the aforementioned mainly because of the growing difficulty of taxing mobile capital (OECD 1998a). In contrast, other revenue sources, such as the share of property taxes, has dropped markedly from 8 to 5% of total taxes, possibly as a result of voter resistance against such highly “visible” taxes, with a higher degree of intergovernmental tax competition (see Tiebout 1956). In order to fully appreciate these tax changes, historical developments normally shed more light on the issue at hand.

#### **4.4.1 Historical developments in the EU**

In 1975 the European Commission aimed at eliminating double taxation on dividends through a centralised harmonisation of corporate tax systems. In 1990 these proposals were withdrawn. At present the corporate tax systems used by EU member states vary considerably, as do the corporate income tax rates (see table 4.2). Imputation is more often than not offered to domestic shareholders only, which discriminates against foreign shareholders. Federations such as Canada and the US make special provision against this kind of discrimination in their constitutions. Corporate taxes in the EU discriminate between (various kinds of) domestic and foreign investors which results in an arbitrary division of the corporate income tax base between the state of

investment and the state of the investor. This kind of discrimination makes some of the Tiebout assumptions invalid (see sec 2.2), more specifically, the mobility of corporations is affected by this unequal treatment, and externalities (economies or diseconomies of scale) occur in the delivery of public services.

Externalities occur because member states offer different tax packages, including privileged tax regimes (eg tax relief provisions such as those provided by tax shelters or havens). The member states may also artificially hinder entrance to, or exit from, their market as in the case of capital or foreign exchange controls. The corporate tax can thus be compared with tariffs or excises (on imports) because these taxes normally act as protective devices against foreign competition, inducing consumers to substitute foreign for local products. Local corporations therefore have competitive advantages in comparison with foreign corporations, and this could induce further tax competition or exportation. The residence principle could solve this problem, but it would mean that countries would forgo the right to tax income within their own territory according to the benefits received. Administrative difficulties do, however, also arise with the implementation of the residence principle (see sec 3.4). The report of Ruding Committee (EC 1992), probably the most influential document on corporate tax harmonisation in the EU, made several harmonisation proposals for corporate taxation. Although tax competition did not appear to be a serious problem (see sec 4.4.2.1), the Committee proposed the imposition of a EU-wide minimum corporate tax rate of 30% and a maximum rate of 40% (inclusive of any local corporate tax). These proposals have, however, not yet been taken up by the EC, although it has attempted to align corporate tax systems and corporate tax rates, by setting a minimum and a maximum rate. Some coordination has also been achieved through unilateral exemptions, tax credits (replacing tax incentives) and bilateral tax treaties.

In 1990 the taxation of groups of corporations (including taxation of parent-subsidary dividends) came under review. Two directives, the Parent-Subsidiary Directive and the Merger Directive, and the Convention on the adjustment of profits of associated enterprises, were adopted. The first Directive aims to reduce the differences between taxation rules for nationally organised groups of corporations and taxation rules for EU-wide groups. It compels the member states of the parent company to either refrain from taxing the profits of a subsidiary that is resident in another member state, or, if taxing such profits, to authorise the parent company to deduct from its own tax amount due, the corporation tax paid by the subsidiary in the other member state. Provision is made for exemption from (or zero-rating) withholding tax of profit distributions

(dividends) by the subsidiary to the parent company. The Merger Directive provides for the deferral of taxation on capital gains on defined cross-border mergers or reorganisation within the EC.

The second directive, the Convention, addresses the problem of double taxation which arises when one member state adjusts the taxable income of an enterprise upwardly (because of transactions that are not valued at arm's length), while another member state does not allow a corresponding decrease of the taxable income of the associated enterprise. These documents state that the market is hampered by restrictions, disadvantages or distortions arising from the tax provisions of the member states, and this still seems to be the case in the EU. The desirability of the source and residence principles in terms of portfolio and foreign direct investment has long been discussed, also in the context of a unified Europe. The effect of the different capital income taxes on savings and investment, and the consequent need for coordination, should therefore be investigated. Although various documents<sup>62</sup> appeared on capital income taxation (direct taxation), only recently did the EU again become active in this field. Two preparatory acts and one report<sup>63</sup> on the coordination of capital income taxes between member states have appeared since 1997. Two types of taxes, namely corporate profits and the taxation of interest income, should be emphasised. The first involves the taxation of pure profits or rents, together with the normal return to equity (active or direct investment income), whereas the second only taxes the normal rate of return (passive or portfolio income).

#### **4.4.2 Corporate profits**

As discussed in section 3.4, corporate profits or direct investment are generally taxed in the source country of the investment, and the residence country either exempts foreign source income from tax or credits the taxes paid abroad. The deferral of tax on the income of subsidiaries until it is repatriated and limitations on the availability of tax credits, pass on various economic effects of the source principle to the residence principle. A number of authors therefore agree that the taxation of foreign direct investment closely follows the source principle in practice (Tanzi & Bovenberg 1990; McLure 1997).

<sup>62</sup> See Martin Jiménez (1999, chapter 4) for a full description of all documents on corporate tax coordination since the inception of European integration.

<sup>63</sup> The preparatory acts and report included COM/1998/0067 FINAL, COM/1998/0295 FINAL, and COM/1998/0595 FINAL (EC 2000).

In practice, both the residence and source principle are applied in the EU. Retained profits are taxed at source, but source states do not have any say over the tax treatment of outflowing profits, such as repatriated profits, even if it provides for the equal treatment of domestic and foreign investors. In some cases, residence states may tax shareholders on realised capital gains. Differentiation (and even discrimination) between retained and distributed profits is therefore common in the EU. Corporate taxation also involves a double taxation problem (classical system). Corporate profits are taxed in the hands of both the corporation (corporate income tax) and the shareholders (personal income tax on dividends). Each member state in the EU has therefore dealt with the problem of double taxation differently.

Table 4.2 shows that most EU member states have some kind of dividend relief system at the shareholder level (SL) and the corporate level (CL). In the latter case, corporate profits that are distributed to foreign investors (private investors or foreign corporations) may be taxed in the country where these profits arise (source), as well as in the investor's country of residence. With the different corporate tax systems (double taxation relief systems) that exist in the EU, dividends can therefore be taxed not only by the source states (under the CT and withholding taxes, if any), but also by the residence state (under the PIT and CT on portfolio dividend income). The level of withholding tax rates if levied on foreigners within the EU also depends mainly on double taxation or treaty agreements with other EU members and may change from time to time.

Double taxation relief falls into different categories (table 4.2), viz.: (1) the imputation system, (2) the special or zero-rate method, or (3) the classical system. The PIT credit at SL mainly represents (1), with a split-rate method at corporate level in the case of Germany<sup>64</sup> - in other words, the system differentiates between distributed and retained earning. The full exemption of dividends at SL represents (2), where a special PIT rate for dividends at SL is charged, or where CT is not charged on distributed profits as in the case of Greece. The double taxation of dividends mainly represents (3), but a small general dividends exemption and a special PIT dividend of 25% for substantial interest shareholders is allowed in The Netherlands. However, the US offers no relief, although withholding tax rates on substantial holdings are normally less.

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64 The local business tax in Germany ranges from 12 to 20,5% (20% for most large cities) and is deductible as an expense for CT.

**Table 4.2: Capital income tax systems in selected federations and the EU, 1998/99**

COUNTRY	BASIC CT RATE <sup>1</sup> (%)	TAXATION OF PORTFOLIO INCOME				DOUBLE TAXATION RELIEF SYSTEM
		Domestic investors		International investors		
		Top PIT rate (%)	Withholding tax rate (%)	Withholding tax rate (%)	Foreign source income	
Canada	38	29	0	0-30	Credit	PIT credit (SL)
Switzerland	45	13	0 <sup>2</sup>	0-20	Credit	PIT credit (SL)
US	35	40	0	0-30	Credit	Classical system
Austria	34	50	25	0	Credit	Special PIT rate dividends 25% (SL)
Belgium	40	58	15	0-15	Credit	Special PIT rate dividends 15–25% (SL)
Denmark	34	58	0	0	Credit	Special PIT rate dividends 25–40% (SL)
Finland	28	55	28	0	Credit	PIT credit (SL)
France	37	59	10-19,4	0-15	Credit	PIT credit (SL)
Germany	43	59	30	0	Credit	PIT credit (SL)
Greece	35	45	15-20	10-40	Credit	Full dividend exemption (SL)
Ireland	36	48	10 & 26	0 – 15	Credit	PIT credit (SL)
Italy	41	46	12,5-30	0-15	Credit	PIT credit (SL)
Luxembourg	37	49	0	0	Credit	PIT credit (SL)
Netherlands	35	60	0	0	Credit	Classical system
Portugal	44	40	20	10-20	Credit	PIT credit (SL)
Spain	35	56	25	0	Credit	PIT credit (SL)
Sweden	28	56	30	0	Credit	Special PIT rate dividends 30% (SL)
UK	31	40	20	0	Credit	PIT credit (SL)

Notes: 1. The selected federations apply subnational corporate taxes and the CT and PIT rates represent only averages at federal level. The capital income tax systems may therefore vary from one subnational authority to the next. The CT and PIT rates include surcharges and local income taxes. In the case of Canada, the provincial surcharge is excluded. If the combined provincial/federal PIT rate (including surcharges) is taken into account, the rates vary from 45 to 60% depending on the province (see also table 4.6).

2. The statutory withholding tax rate on residents in Switzerland is 35% but is refunded, provided the respective earnings are declared as income for tax purposes (PwC 1999a: 760).

Source: IBFD (1998); PwC (1999a); OECD (2000a).

The selected federations therefore also have an extensive list of treaty agreements on dividends, interest and royalties earned by foreigners. Portfolio interest received from certain debt obligations, and interest paid by banks and insurance corporations to specified foreign taxpayers, may be much lower or exempt from US withholding taxes. This type of investment is therefore attractive, especially for residents from source countries in Latin America.

#### **4.4.2.1 The US, Canada and Switzerland**

As already mentioned, the residence principle is applicable to corporate profits and portfolio income (interest, dividends, rents and royalties) in the US, and involves equity being defined on a citizenship basis. A foreign tax credit is allowed (FTC), provided that the credit does not exceed the amount that would have been owed under US tax law. In 1995, the income tax liability of American MNCs before the foreign tax credit (FTC) was \$197 billion; the FTC reduced that figure by \$42 billion (Rosen, 1998). This again ties in with the fact that taxation of income from a foreign operation can be deferred if the operation is a subsidiary. The subsidiary's profits are only included when repatriated. The residence principle entails equal treatment of US citizens and corporations in the same country, but may lead to different treatment of citizens and corporations from different countries. The question of whether horizontal equity should be defined on a national or worldwide basis again arises. The residence principle may also distort international production decisions. US corporations operating abroad have to pay US income tax for their US employees, whereas a country operating on the source principle has no analogous obligation. All other things being equal, the US corporations might end up paying more for their labour, making them less competitive because of this cost disadvantage (Committee of Finance, 1987). Obviously, this assumes that US corporations cannot respond by simply hiring foreign workers and the incidence of the tax depends on the elasticity of the supply of US workers to US firms abroad.

Another issue at stake is the fact that the role of individual income taxes in the state revenue systems of the US has become more important over time. In 1960, 12.2% of state tax collections was from individual income taxes, but by 1994 this figure had risen to 31%. In 1998, personal income tax replaced sales tax as the single most important source of revenue for the US states after the Great Depression. Continued pressure is therefore expected on sales tax as a result of factors such as electronic commerce (see sec 4.3.3), the shift to a service-based economy, and the political pressure to exempt broad categories of products traditionally considered taxable.



Although the US economy picked up pace in the late 1990s, many more states cut income and sales taxes than before (OECD 2000a). The peak was reached in 1997 when between 16 and 21 states enacted measures to reduce sales taxes, and in 1998 when 27 states with income taxes, enacted tax reductions<sup>65</sup>.

Most of the US states (except Nevada, South Dakota, Texas, Washington and Wyoming) levy their own corporate taxes at a rate that ranges between 1 and 12%. Corporate tax revenue accounts for less than 6% of state tax revenue and about 2,5% of total state and local tax revenues. All of the complications that arise in analysing the incidence and efficiency effects of the federal corporation income tax also bedevil attempts to understand the state systems. State governments and taxpayers spend large amounts of resources administering and complying with the tax. The importance of the tax has therefore continued to shrink as a source of revenue. Various factors such as an increased number of professionals dedicated to tax law and a greater amount of advanced planning by businesses to avoid corporate tax liabilities are responsible for declining in importance. Additional factors, such as continued political pressure on states to grant tax breaks to corporations with tax exportation<sup>66</sup> are also evident: the relatively small amount of revenue collected; the significant collection costs and the draconian steps required to revive the tax, question its long-term viability. One of the significant threats to a fair and efficient tax system is the continued quest for economic development.

The relationship between economic development and tax policy (including intermediate government levels' tax policy) has long been debated (see chs 1 and 5). It is argued that state tax competition for economic development is a worthwhile public policy objective because it leads to innovation, experimentation and efficiency (see ch 2 and OECD 2000a). Interstate competition, which aims to lower the burden for all taxpayers while ensuring the provision of necessary public services, can therefore have long-term, beneficial effects on a state's economy.

65 At present, 43 states and the District of Columbia have an individual income tax and in some states, only some components of income such as dividends and interest are taxed. State income taxes tend to be similar in structure to the federal tax. The tax base is found by subtracting various deductions and exemptions from individuals' adjusted gross income (AGI) and the tax liability is determined by associating a marginal tax rate with each of the several income brackets. The marginal rates are much lower than those of the federal system. Among the states that levied income taxes in 1998, the median value of the highest bracket rate was 7%. The maximum was 10,8% in Rhode Island. Also, the states differ considerably with respect to rules governing deductions and exemptions. Some rules prohibit practically all deductions, while others follow rules similar to the federal system. Most state income taxes are deductible from the federal tax liability but in only 10 states the federal income tax is deductible. State governments do not tax interest on obligations issued by federal government and the same is true of federal government taxing state and local bonds. Although these financial instruments are normally exempt from, say, capital gains taxes, the preferential treatment of debt is again applicable.

66 Here it is important to know how much of the burden is exported to citizens of other states and how the portion that is not exported, is shared by the residents of the state. The theory of tax incidence becomes important, and immobile factors of production are likely to end up bearing a higher tax than mobile factors, *ceteris paribus*.

Although interstate competition is to some extent regulated by allocation in the US<sup>67</sup> and Canada<sup>68</sup> (see sec 3.4.1.8), the less desirable types of interstate competition such as targeted tax incentives aimed at particular industries or individual businesses still appear. States therefore still compete aggressively with one another to attract industry by giving preferential tax treatment (most notably income and property taxes) and direct subsidies for infrastructure development and worker training. The use of targeted incentives is, however, often portrayed as an unthinking response to the perceived political pressure to create jobs and spur economic development, and targeted tax incentives normally violate the principles of sound tax policy (see also chs 3 and 5).

The provinces in Canada can set their own tax rates, and federal government will administer tax credits on their behalf (investment tax credits for manufacturing equipment or R and D) which reduce the amount of provincial tax owing to the province (similar to a pure system of tax sharing where the federal agency collects all revenues). Three provinces, Ontario, Quebec and Alberta which are known for natural resources, collect their own corporate income tax. It is interesting to note that these three provinces account for nearly 75% of the provincial corporate income tax base in Canada.

The CT rates at provincial level range between 2,5 and 17%, and the PIT rates between 6,2 and 21,9%. As mentioned earlier, all provinces (including those that collect their own corporate income tax) use a common factor formula (equal weights on gross revenue or sales, and salaries and wages or payroll to determine the share). Even those provinces that collect their own tax, use a base similar to the federal base. As pointed out in section 3.4.1.8, allocation methods in federations can provide more autonomy for government since they can choose their own rates for revenue purposes. If governments do not agree with the shares (as in the case of the US), then over- or undertaxation may result. The US system's lack of uniformity extends well beyond the definition of the factors in the formula (typically payroll, property and sales) and the weight assigned to each (typically one-third each). This is reflected in the fact that some states interpret affiliated firms as separate entities, and others as a unit – hence the existence of a hybrid of classical and integrated systems. Another problem regarding the apportionment formula in the

<sup>67</sup> Although separate accounting, allocation and apportionment are available in the US as coordinating measures, formula apportionment is mostly used in the states. Formula apportionment is used in the US to refer to business income being divided across states while allocation refers to nonbusiness income being assigned to a particular state. States share the proceeds of corporate income taxes according to the Massachusetts three-factor formula based on the share of a multistate corporation's or MNCs' activities in each state.

<sup>68</sup> A primary difference between the US and Canadian approaches is that, in the former, states may not agree to the same base or factors for apportioning income and the formula has to be linked to their territory. In Canada, a more harmonised approach concerning the amount of corporate income allocated to the provinces is followed. A common allocation formula and to a significant extent, a common base are applied. In part, this is driven by the tax collection agreements that the federal government has with seven provinces whereby the federal government collects provincial CTs (at no charge), and the provinces agree to use the federal tax base for determining income.

US is that not all states adopt the same definition of taxable income. Martín Jiménez (1999) shows that dividends are particularly problematic and with this, the interpretation of the Supreme Court's ruling concerning "nonunitary" dividends (dividends received from affiliated firms not engaged in a unitary business with the taxpayer). Mintz (1998) emphasises that administrative and compliance costs can be reduced if the same tax base and formula are agreed to.

In contrast, the Swiss federation levies direct federal income tax at a flat rate of 8,5% on profits after tax. In addition, each canton has its own tax law, and levies cantonal and communal income taxes at different rates. The Swiss cantons levy corporate income taxes on a progressive basis, subject to minimum and maximum rates and based on the ratio of profit to capital and reserves. Swiss cantons may use their own factor formula, as in the US, and there is no consolidation of returns in Switzerland. The approximate range of the maximum statutory income tax rate on profit for federal, cantonal and communal taxes is between 14 and 45%, depending on the corporation's profitability and place of residence. Taxes are treated as tax-deductible expenses so that the maximum effective tax rate varies between 12 and 31% (PwC 1999a: 683).

The difficulties that might arise in separate subnational legislation and administration of corporate income taxes are therefore clear (for exhaustive discussions, see Gordon & Wilson 1986; Goolsbee & Maydew 2000). The Canadian experience shows more signs of uniformity than the US and Swiss examples, and the two latter cases can be improved via tax sharing, surtaxes (piggybacking such as in Canada), or the unification of state systems (McLure 1997:103). Also, it should be mentioned that the CT rates, and thus revenues from these taxes at subnational level in Canada, Switzerland and the US, are much lower than at the federal level (table 4.2). Although tax exporting and interstate mobility can become problematic, the impact of these taxes is less than at central or national levels in the EU, which has to finance the expenditures of countries.

#### **4.4.2.2 Changes in capital income taxation**

As pointed out in chapter 1, changes in capital income taxation can be traced back to the tax reforms in the 1980s in the US, with various other countries following suit. Besides the tax reforms in the US in 1981 and 1986, tax cuts were also evident between 1986 and 1990 in other major industrialised countries, such as, Germany (by 6 percentage points on retained but not

distributed profits), France (8 percentage points) and Japan (5,5 percentage points). National systems of capital income taxation therefore changed considerably during the 1980s and 1990s and behavioural responses of capital income to these tax reforms were widely studied. Many OECD countries lowered the statutory rates of both corporate and personal income tax, while simultaneously broadening the tax bases. Between 1986 and 1990, 18 out of 24 member countries of the OECD reduced their key central government corporate tax rate (OECD 1990).

Smaller industrialised countries also reduced their statutory corporate tax rates with Sweden, for instance, cutting its central corporate tax rate from 52 to 30% after 1991. This represented one of various tax reform efforts by European countries, notably Scandinavian countries (including Sweden) and Austria, which went against the principle of comprehensive income taxation. These countries introduced dual income tax systems in which capital income is taxed at a lower rate than labour income. These tax reforms were accompanied by an increased use of withholding taxes or bank notification schemes in order to tighten the enforcement of interest income taxation. Since most national governments levy withholding taxes on domestic residents only, many savers are still able to escape interest income taxation by investing in neighboring EU countries. This trend will continue in the future because more tax reform programmes are also planned for the new millennium.

Table 4.3 shows the various fiscal reform efforts in selected OECD countries which started in 1999, and are planned to continue way into the new millennium by these countries. Various factors have to be taken into account when interpreting this table. With reduced taxation, increased public expenditures were also possible without seriously weakening the countries' estimated fiscal positions (specifically also in terms of the EU) for the following reasons:

- (1) Reduced interest payments on public debt from 1999 to 2002 will act to strengthen the noncyclical budget position in almost all EU countries, particularly Greece, the Netherlands and Sweden, as well as various other OECD countries such as Canada and the US. The widespread practice of indexing the tax system to prices instead of earnings implies an automatic strengthening of fiscal positions in the absence of offsetting discretionary measures, for example, the problematic fiscal drag in France and Germany.
- (2) Improved labour market conditions are increasing the level of potential output, and hence the level of structural government revenues, particularly in Greece, Italy, Portugal, Spain and the UK.

- (3) Improvements in tax collection systems and greater efforts to limit tax evasion are increasing structural revenues in Greece, Italy, Portugal, Spain and the UK especially (OECD 2000b:8).

**Table 4.3: Main fiscal policy reforms in selected OECD countries, 2000 (and beyond)**

COUNTRIES	YEAR	REFORMS
Belgium	2000	Acceleration in the multi-annual <i>reduction in social security contributions</i> .
Canada	2000-01	Full indexation of <i>income tax system</i> , cuts in <i>PIT</i> and <i>CT</i> (see table 4.6).
Finland	2000-01	<i>Income tax</i> cuts and a reduction in <i>social security contributions</i> .
France	2000	A reduction in the <i>VAT rate</i> by 1%; reduction in the <i>VAT rate</i> on dwelling improvement, cuts in <i>PIT rates</i> ; abolition of a <i>surtax on corporate profits</i> , cuts in <i>real estate tax</i> . Changes are partially offset by increases in social security contribution on profits and in a general tax on polluting activities.
	2001	A cut in <i>PIT rate</i> (top <i>PIT rate</i> from 54 to 52,5% by 2003); reduced <i>social security contribution rates</i> for low-wage workers; reduction in <i>gasoline taxes</i> . Pension income and social benefit revaluation, job creation by local governments.
Germany	2001	Reform of <i>PIT</i> and <i>CT</i> , including further reduction in statutory <i>PIT rates</i> (top <i>PIT rate</i> to change to 42% by 2003) and <i>CT rates</i> (rates on corporate profits to change to 25%) and an increase in the basic income tax allowance; broadening the tax base.
Ireland	2000	A cut in taxes on labour income, a move towards the application of unified tax rates on traded and nontraded goods industries ( <i>VAT rate</i> becomes 12%). Increased general infrastructure spending (1% of GDP).
	2001	Continued tax reform and increased general infrastructure spending (1% of GDP).
Italy	2001	Tax cuts, mainly for low-income earners; lower social security contributions; reduced <i>CT</i> . Increased spending for infrastructure and social transfers.
The Netherlands	2001	A reduction in tax rates and an increase in earned income tax credits. Changes will be partially offset by reduced scope for tax deductions; an increase in environmental levies and <i>VAT rates</i> ; higher taxes on imputed income from wealth.
Sweden	2000-01	Income tax cuts.
UK	2000-01	A reduction in the basic income tax rate (top income tax rate already changed to 40 per cent); lowering of taxes for small and medium-sized enterprises; reduction in national insurance contribution. These changes will be partially offset by an introduction of a new climate change levy and increased tobacco duties. Increases in spending on public health. Broadening the tax base and improving tax compliance.
Notes: The packages listed above are estimated to cost approximately a ½% or more of the combined OECD GDP.		

Source: OECD (2000a).

From table 4.3 it is also clear that the view of the selected countries' has common elements in tax reductions, and thus a far more coordinated approach for the EU. Again, this approach could, with increased expenditures, adequately restrain and prioritise, increasing the efficiency of governments over the longer term. In Canada specifically, changes in its taxation relative to its

neighbour, the US, can also be seen as a strategy to further its economic integration with the US which started with the inception of the US-Canada FTA in 1989. Table 4.4 shows that in future, Canada's CT rates will be lower than before, and directed more towards the creation of an investor friendly environment. This will also include special measures to promote entrepreneurship within Canada (Canada 2000).

**Table 4.4: A comparison of corporate taxation in Canada and the US**

<b>2000</b>	<b>CANADA</b>	<b>US</b>
Federal income tax rate	29,1	35
Average provincial/state income tax rate	13,9	4
Federal-provincial/state income tax rate	43	39
Federal-provincial/state business tax rate (including capital taxes)	46,6	40
Small business (federal)	13	26
Small business (total)	21	30
Manufacturing and processing (federal)	22	35
Manufacturing and processing (total)	35	39
Growth sectors (federal)	29	35
Growth sectors (total)	44	39
<b>2005</b>	<b>CANADA</b>	<b>US</b>
Federal income tax rate	22,1	35
Average provincial/state income tax rate	9,7	4
Federal-provincial/state income tax rate	31,8	39
Federal-provincial/state business tax rate (including capital taxes)	35,4	40

Source: Canada (2000).

Factor market integration between Canada and the US is close, with Canada-US financial flows generally having been free of controls during the past 50 years. Capital mobility between the two countries is high. The US accounts for over half of Canada's gross FDI assets and liabilities and for two-thirds of Canada's net international liability position<sup>69</sup>. The US has accounted for just over half of Canada's direct investment inflows and outflows, roughly the same as the proportion of intra-EU direct investment. The US also accounted for over four-fifths of Canadian equity investment inflows and outflows in 1999, while intra-EU equity flows accounted for about half of the total among EU countries (UNCTAD, 1999). The harmonisation of capital income

<sup>69</sup> Although labour mobility between the two countries has increased, especially amongst skilled workers, it remains limited as a share of the total labour force.

taxation between these two countries, together with Mexico (the NAFTA agreement), will therefore tend to become even more important in future as these countries move towards a common currency regime<sup>70</sup>.

In the next section, the importance and/or the effects of capital income taxation on, say, investment behaviour, are investigated. In section 2.3.2.1, it is argued that investment is normally more important than savings, and in this regard the residence principle that is the least distorting in terms of investment, should be favoured. This argument was taken further in section 3.4, and various other factors, including the tax principles, were also taken into consideration. This issue will now be broadened to include the federations in question and the EU.

#### **4.4.2.3 The importance of capital income taxation**

Although capital income taxation seems to have a substantial influence on investment behaviour, this influence (and the actual magnitude thereof) on investment decisions remains unclear when empirical evidence is taken into account. This evidence seems to be rather inconclusive and different factors may be responsible for contradictions in empirical studies. One of the factors could be the very nature of aggregate data on tax rates (typically corporate tax revenues over GDP) or the endogeneity of the tax rates themselves. Another factor could be the particular location choices of corporations. Taxation could be the distorting factor because corporations choose to locate where nontax factors, such as, business opportunities, political stability, economic stability, labour stability, security and respect for property rights, and transportation costs, are almost equal. The effects of corporate taxation on FDIs may therefore depend on the method of international double taxation relief or the different corporate tax systems in use, on the source of investment income, and on the objectives pursued by corporate managers (Martín Jiménez 1999).

Enrich (1996:54) provides a comprehensive review of literature on the effectiveness of tax incentives to attract investment (see also sec 3.4.1.6). He concludes that econometric evidence establishes that tax incentives “simply are not large enough to exert substantial influence on

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<sup>70</sup> The size of a country relative to others in a monetary union or fixed exchange rate arrangements has implications for the net benefits to a country and, in this regard, the situation of Canada vis-à-vis the US is somewhat different from that of several European countries vis-à-vis one another (see OECD 2000a). The Canadian economy is much smaller than that of the US, while the Euro area includes several economies of roughly the same size. Given its size and trade specialisation, the US is relatively insensitive to the exchange rate policies of its smaller trade partners - although trade friction with Canada has occasionally arisen in some sectors.

business location decisions or on levels of economic activities". Nontax factors that affect direct investment which are directly or indirectly dependent on government expenditure should also be taken into account: (1) size of the market; (2) the business climate (attitudes of governments and trade unions, the legal framework); (3) physical infrastructure and a good communications network; (4) financial markets and regulations including banking secrecy - capital; (6) availability of subsidies outside the tax system (WEF 1999). Wilson (1993) surveys 68 location decisions made by nine US-based MNCs over a 21- year period. These corporations had facilities in both low- and high-tax countries. The corporations belonged to different sectors, and the impact of taxation on the location decision was dependent on the sector to which that the firm belonged. It is concluded that taxes do not necessarily affect corporations' decisions, since taxes are seen as the price to be paid for an improved infrastructure, a better-educated workforce, or other public goods important for their activities. This again corresponds more with the idea of expenditure competition. In order to show how dualistic some of these results can be, Hines (1999:37) concludes that in alternative cases "taxation significantly influences foreign direct investment, corporate borrowing, transfer pricing, dividend and royalty payments."

This result can also be extended to other studies on state corporate income taxation in the US (see Papke 1991). These results show that state corporate income taxes may influence the location of investor decisions. Tax rates and tax incentives thus continue to be important tools for pursuing the objectives of state governments, and therefore horizontal tax competition. Tanzi (1995) argues that this may distort the allocation of investment and therefore change tax revenues and lower the level of taxation. This process may also cause a spontaneous tax rate harmonisation. Secondly, much of the evidence points to stability. The sensitivity of location of company debt in response to local statutory tax rates has not changed. Governments have not given greater inducements to new investors or to mobile businesses such as finance. Tax rates did not fall by a greater amount in homogenous free trade areas such as the EU and there was little convergence of effective or statutory tax rates. A new international environment, both for governments and taxpayers, is again emphasised. Governments can respond by not only lowering their tax rates but also by making resident corporations less susceptible to the attraction of low tax rates. More stringent CFC rules and more comprehensive transfer pricing guidelines are two examples.

It should again be noted that the developmental status of the country involved would probably also play an important role. In developed countries, where there should already be a well-established infrastructure, tax factors may be more significant than in developing countries,



where other institutional factors may become more important. Furthermore, as the world becomes more integrated, and more variables are equalised (eg exchange rates) as in the case of any monetary union or federation, tax differentials will play a more decisive role.

The EU member states have changed their corporate tax systems significantly since the mid-1980s following the US example. The general direction of these reforms was towards lower statutory tax rates combined with more comprehensive corporate tax bases. The experience in federal countries such as Canada, the US and Switzerland is reported in chapter 9 of the Ruding Report (EC 1992). This indicates that different CTs can coexist within a common market or economic union without internal borders. As already mentioned, in the case of commodity taxation, these countries have an overarching federal government, which means that a federal CT exists, and this tax should iron out some of the differences in provincial, cantonal or state CTs. The Ruding Committee (EC 1992:99) reports that not much evidence of a converging tax policy and destructive tax competition in the taxation of business income could be found in Europe. By comparison, in the case of taxation of interest, the “danger of tax competition leading to atrophy appears to be much more serious”.

Although a few surveys were also conducted in the 1960s and 1970s which show that taxes are a relevant factor in investment decisions, it would appear that the Ruding Committee (EC 1992:99) could find no decisive evidence to prove that taxation, although one of the factors in location decisions of corporations, is in fact, the dominant factor. Devereux and Pearson (1990:103), for instance, investigate data on the flows between seven countries from 1984 to 1989, and use a sophisticated measure of the cost of capital. It is suggested that the choice between domestic investment and total outward FDI is not significantly affected by taxation, but that taxation does affect the location of outward FDI. These results are extended to examine the impact of tax integration schemes. Giving a tax credit to foreign shareholders may induce a large increase in inward FDI from “exemption” countries (eg France, Germany and the Netherlands exempted foreign-source dividends in this period), but not from “partial-credit” countries such as Japan and the UK. The total effect would be small for the US (residence principle and classical system). The results again emphasise the influence of the methods of double taxation relief and taxation principles on investment (table 4.2).

Haufler (1999) argues that the existence of rents (or royalties) accruing to internationally mobile firms may be able to explain a moderate fall in overall effective rates of corporate taxation, while

the ability of multinational firms to shift profit income to countries with low statutory tax rates offers one possible explanation for the observed tax-rate-cutting, base-broadening pattern of corporate tax reforms in the EU. The tax reforms in Scandinavian countries during the 1990s may also partly explain why the EU average of effective marginal tax rates has hardly decreased in a period of increasing capital mobility. Under the DIT, all capital income is taxed once at a non-differentiating, flat CT rate. This limits opportunities of tax arbitrage (CT rate equals lowest PIT rate on labour income) and also deals with growing capital mobility. Cnossen (1998:243), however, argues that differences in statutory tax rates for the exploitation of tax avoidance seem more important than the effective tax rates.

Profit-shifting operations through transfer pricing by a MNC depend mainly on a comparison of statutory tax rates. These operations are also relatively cheap in comparison with the relocation of physical investment, hence corporate tax bases ought to be particularly sensitive to this type of tax arbitrage. One way of limiting profit-shifting strategies by MNCs is to follow the US example and supplement the traditional arm's-length-pricing rule with the comparable profits method. Since 1994, this regulation has given US tax authorities the right to correct corporation taxes on the grounds that a firm's profitability has been lower than that of comparable firms in the same branch over a longer period. This solution, although not exactly identical, is also evident in the legislation of other countries such as Australia and Canada. Another, although generally less preferred, solution to profit-shifting strategies, could be a EU-wide application of formula apportionment (or unitary taxation) which is being used in Canada, Switzerland and the US (see secs 3.4.1.8 and 4.4.2). The Canadian application of formula apportionment is, however, favoured, because of its unitary application in the different provinces.

#### **4.4.3 Interest income**

The third part of this section concentrates on the taxation of interest income. The importance of interest income in world economies today was pointed out in the previous section. The aim of this section is therefore to elaborate on these experiences. As already mentioned in section 3.4, the residence principle is legally followed according to the taxation of interest income. Residents of all OECD countries are required by law to declare all interest income, regardless of where it has been earned, but are entitled to a tax credit for any withholding taxes that have been levied by the source country. This is evident from the second last column of table B.5 which also summarises the current rules for the taxation of individual interest income in the EU. The return

on debt (ie interest) is taxed by the residence state and, if a withholding tax applies, by the source state. If the source state does not levy a withholding tax, interest income may escape taxation altogether and become part of the tax evasion problem (see section 2.3.2.1). For instance, if the interest income accrues to a tax-exempt investor, it is channelled through a tax haven, or is not included in the tax return. These considerations also apply to the return on know-how, that is, rents and royalties.

The main problem with tax on interest income, residence-based or withholding, is either tax evasion or tax competition respectively. The Scandinavian countries, Germany and Austria which were originally high-tax countries with no withholding taxes (source taxes) on individual interest income, provide the necessary evidence. A vast majority of interest income effectively escaped taxation. Scandinavian countries therefore switched to a DIT where, for tax purposes, capital income is treated separately from labour income. These countries reduced top PIT rates on capital income well below the top marginal tax rates applicable to labour income. The switch was accompanied by the installation of a reporting system, which enforced the taxation of domestic interest income at the new, lower rates. The tax reform in Austria was similar in some but not all respects. As in the Scandinavian countries, the tax rate applicable to capital income was lowered substantially below the marginal tax rate on other forms of income. However, because of Austria's strict bank secrecy laws, a final source tax on interest income was introduced to enforce this tax (*Abgeltungssteuer*).

The treatment of capital income under the DIT is similar to the CBIT and the effects ought to be similar (see sec 3.4.1.5). In comparison with the classical system, which relies on the residence principle for taxing the full return on capital, both of these taxes (normally under imputation) have to be levied on a source basis to adhere to the neutrality and subsidiarity conditions. Labour income, however, is subject to higher (progressive) tax rates, and all capital income is taxed once at a nondifferentiating flat rate. Interest is taxed at the level of the recipient, instead of at corporate level. A nonrefundable withholding tax on interest, set at the level of the CT rate would make the treatment of capital income paid to individuals or investors liable for PIT or CT on a residential basis, as is the CBIT. The CBIT is, however, normally suggested for the US, where there is not much difference (and in some cases the rates are even equal) between the PIT and CT rates. In the EU, however, the PIT rates are normally much higher than the EU's CT rates (table 4.2), as well as the US PIT rate (although not higher than the US CT rate).

In 1989, a proposal in an EC directive for the imposition of a minimum source tax of 15% on all interest income failed to receive the required unanimous support of Member States. As far as the taxation of interests and royalties is concerned, the residence principle applies: interest income is not taxed in the country where it is earned, but in and by the investor's country of residence. Each member state, however, levies a withholding tax on savings to residents of other member countries. If that withholding tax is zero-rated and the source country provides adequate information to the tax administration of the country of residence on interest that flows outward, the system makes investors indifferent to domestic or foreign assets. Unfortunately, not every member state uses zero-withholding taxes, and there is hardly any exchange of information between member states. Without adequate information (and with the subsequent incentive for tax evasion) any rate, other than a zero rate, is better for a withholding tax.

In May 1998, the EC launched a new savings directive to enforce the taxation of interest income in the EU. According to this proposal, each EU member state would be required either to levy a 20% withholding tax rate on all interest paid to individuals residing in the EU, or to issue a notification of the interest payment to the residence country of the EU investor (EC 1998b). Most of the opposition to this proposal came from the UK with fears that this tax would cripple the London-based Eurobond market. As argued in section 3.4, a minimum withholding tax could result in further discriminations between countries and reverse tax competition if not levied appropriately. Harmonisation would again occur for the benefit of local investments, but with vast misallocations of capital (Alworth 1999:218).

The effect of withholding taxes or reporting schemes amongst member states on portfolio income is also important, specifically because it does not extend to foreign investors. In this regard, the significance of this provision is well documented by real-life experiences. Before 1984, the US levied a 30% withholding tax on interest income to nonresidents<sup>71</sup>, but the double taxation treaty with the Netherlands Antilles provided for a zero rate, with the sole purpose of issuing Eurobonds.

As a result, in 1983 the interest income to the Netherlands Antilles accounted for more than 33% of all interest payments by US residents to the rest of the world. The fact that most interest payments to foreigners became exempt from withholding taxes had the effect of sharply

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<sup>71</sup> The main reason for the withholding tax was to create a level playing field because most developed countries exempt foreigners' interest income.

increasing the sales of US domestic bonds to foreigners, and reducing the issuance of bonds through the Netherlands Antilles.

In October 1987, Germany's Finance Ministry announced that a 10% withholding tax on interest income would apply to both domestic and foreign residents from 1 January 1989<sup>72</sup>. In anticipation of this tax, German long-term capital exports reached a record level of DM85 billion in 1988 (almost four times as high as in 1987), forcing the government to abolish the withholding tax in July 1989. In 1992, the German government was forced by its Supreme Court to reintroduce a 30% withholding tax on interest income for equity reasons. The main difference was, however, that foreigners were now excluded from the tax. While the tax again caused substantial capital outflows (90% of these outflows went to Luxembourg), it would seem that thus far, the exclusion of foreigners has made the withholding tax sustainable, despite its relatively high rate (Haufler 1999).

From the aforementioned, it is clear that the size of a region or country plays a vital role in tax competition as discussed in section 2.3. Luxembourg also opposed the proposal of a withholding tax of 20% in the EU because it is the prime beneficiary of the present system of uncoordinated interest tax policy. Luxembourg, which is sufficiently small in a theoretical context, is confronted with a more elastic capital base, and therefore finds it optimal to set the capital tax rate at a lower level than its large neighbors. A disproportionate share of capital is drawn into the small country, which more than compensates for the welfare loss induced by the inefficient tax choice. Although tax-related costs of cross-border investment fall disproportionately on small countries, a level playing field is represented by a corporate tax rate that is significantly lower in a small as opposed to a large country (Vording 1999). Luxembourg therefore has no incentive to join an international agreement on capital tax coordination. In this regard, unanimity in voting on tax issues is a concern in the EU. Net contributors to the EU budget such as Germany and France want a system of majority voting where the wishes of lower-tax states such as Ireland can be opposed<sup>73</sup>. Ireland offers foreign investors preferential tax treatment, and recently entered into

72 This can be seen as an open economy variant of the aggregate efficiency theorem in optimal tax theory, implying that foreign and domestic sources of income should be treated equally in terms of taxation (see sec 2.3).

73 The recently adopted Nice Treaty (2000) makes provision for a shift in power within the EU towards the large countries (Germany, France, Britain, Italy, Spain and Poland. National votes have been set for if and when Poland joins. Within this "directorate", Germany seems to have gained power, becoming "the first among equals". Although the rights of small countries have been preserved according to their populations, the voting weights of larger countries have increased. These votes have also been extended to more areas but social security and tax policy still remain subject to national veto (see The Economist 2000a).

negotiations with the EC on a corporate tax cut (wanting to reduce the corporate tax level to 12,5%)<sup>74</sup>.

The issue at hand is again the sensitivity of corporations to tax changes. Tax havens are a case in point. Total direct investment by G7 countries in tax havens in the Caribbean and South Pacific grew more than fivefold between 1985 and 1994, to over \$200 billion (OECD 1998). Tax havens account for 1,2% of the world's population and 3% of the world's GDP, but 26% of assets and 31% of the net profits of MNCs of the US, though only 4,3% of their workers (Hines 1999). This seems to prove that these havens serve only as asset destinations or tax shelters, and that the havens' asset bases are not covered by subsequent domestic operations.

Another issue that becomes evident from the discussion on withholding taxes is that the type of investors (resident or nonresident) is crucial. Haufler (1999) argues that there are two groups of investors in the world, highly mobile ones and immobile ones. A more recent study (Grubert 1998) investigates changes in behaviour as determined in terms of tax planning by corporations, and tax competition by governments. Results show firstly, that small (open) and low-income countries cut their effective tax rates (METR) on corporations the most because they are expected to be more susceptible to increased capital mobility. Nothing prevents these countries from making their METR lower than zero that is lower than expensing<sup>75</sup>. Corporations with a low overall foreign tax rate on repatriated income in 1984 were able to achieve larger than average tax cuts in the countries in which they were operating. This may reflect their increased bargaining power, because they are more mobile, or increased opportunities for exploiting their skill at tax planning. It is therefore rational for individual EU members not to levy withholding taxes on internationally mobile investors, because these investors are highly mobile. This is true even though all countries provide tax credits to their domestic residents for withholding taxes paid abroad. International investors, furthermore, do not, at the margin, pay taxes on interest income in their country of residency (see secs 2.3 and 3.4).

The second group of investors is more immobile and this relates to evidence that portfolio investors in all OECD countries exhibit a significant home bias (see also Janeba & Peters 1999).

<sup>74</sup> The Irish economy, however, has grown substantially and some argue that as such concerns about tax rate reductions are uncalled for.

<sup>75</sup> The US made its METR roughly equal to zero in the 1980s with its accelerated tax depreciation provisions (McLure 1990). Ongoing debates culminated in the Tax Reform Act of 1986 in the US and the top corporate tax rate of 46% reduced to 34% with a substantial reduction in investment incentives, for instance the elimination of the international tax credit (ITC) and a weakening of acceleration in depreciation allowances. Tax reform in Canada has generally been more in line with the US than, say, Australia.

It is therefore rational for individual member states to levy withholding taxes on domestic investors only. This, however, creates a loophole that can be exploited by international investors. Tanzi (1995:130) points out that most EU countries, with a few exceptions, generally exempt incomes earned by nonresident investors on banking deposits and on the holding of securities and bonds. The same argument holds for the US with cross-border effects. Some developing countries, in this case Latin American countries, are sometimes “forced” to levy lower tax rates on the dividends and interest incomes of their citizens, because the latter can earn tax free interest income in the US (PwC 1999a:760). The solution that developing countries should implement the residence principle is generally infeasible in terms of administration (McLure, Musgrave & Sinn 1990). Alternative measures, such as ending deferral, dividend deduction through the integration of corporate and shareholder levels<sup>76</sup>, and the introduction of VAT were also not enacted in the US in the 1980s.

Cross-border effects also occur between Canada, Mexico and the US because of their bilateral linkages. With lower US corporate rates in the 1980s, Canada soon followed suit (although tax rates still remained relatively high in comparison with other OECD countries) because increased debt financing in Canada by cross-border-integrated MNCs would erode the Canadian tax base (you will recall the favouring of debt over equity financing because of the tax exemption of interest rather than equity)<sup>77</sup>.

With the previous sections in mind, the next section will focus on tax coordination options in the EU as they pertain to commodity and capital income taxation.

#### **4.5 AN EVALUATION OF TAX COMPETITION AND COORDINATION IN THE EU**

It is relatively clear from the previous section that the EU still has a long way to go to reach the ultimate goal of uniformity in terms of the taxation of corporate profits (direct investment) and interest income (portfolio investment). All of the problems, as described in section 3.5, are still visible in the EU. Although international tax differentials on investment income may be

<sup>76</sup> Sinn (1990b) argues that dividend deduction should only be allowed on new share issues because of revenue losses and windfall gains although administrative difficulties might occur.

<sup>77</sup> Apart from the bilateral linkages between the Canada, Mexico and the US, various differences still occur in corporate tax and rate structures (see table 4.2). Canadians, for instance, started out in the 1990s with a modified classical system but this changed to become a more integrated approach (imputation with tax credits). This correlates with the Australian system where shareholder relief of various kinds for personal tax on dividends is unrelated to corporation taxation paid on distribution systems.

tolerable where capital controls are still prevalent, these differentials are not tolerable in a common market where production conditions are similar, tariffs nonexistent and exchange controls absent. The tax elasticity of capital flows is therefore high in a common market with large distortions in capital allocation if tax differentials are large (Musgrave 1967:314). In this regard, cross-border investment decisions in the EU are still distorted because of widely divergent tax rates on capital income. This includes a divergent treatment of the return to equity (taxed at corporate level) and the return on debt (which may not be taxed at all) and jeopardises tax subsidiarity with revenue implications for EU members.

Furthermore, the current dividend relief system only partly addresses the double taxation problem and complicates the treatment of inward and outward dividend income. The deductibility of interest at corporate level, in conjunction with capital-rich exempt domestic and foreign sectors, creates a loophole in corporate taxation, and distorts the debt-equity choice. The agreement on the allocation of tax bases throughout the EU, and on the basic structure of the instruments for tapping those bases, is of immediate concern in terms of the concept of subsidiarity in the context of the Maastricht Treaty (1992). The source principle or a withholding tax would probably serve as guidance in the allocation of the corporate tax base (direct and portfolio investment), that is, corporate profits and interest and royalties included, because tax sovereignty (and thus subsidiarity) is normally linked to a country's tax base. The proposed VAT on the premise of the origin principle is an apt example. In this context, the concept of tax competition has to be revisited, especially as interpreted in the EU.

#### **4.5.1 Harmful tax competition**

Recently the concept of "harmful" tax competition has been re-emphasised. Two attempts have been made to define this concept in terms of corporate taxation, that is, the Code of Conduct agreed by the Council of Finance Ministers (1997/98), and two reports by the OECD's Committee of Fiscal Affairs (OECD 1998a & 2000b). The Code of Conduct concentrates on discrimination between residents and nonresidents and distinguishes between domestic, as opposed to foreign income, arising from real activity. The OECD's approach that tax-driven migration of international activities is on the increase, primarily concentrates on low tax rates being charged on particular forms of income. Both attempts should be seen against the backdrop of growing resistance to preferential tax regimes globally.



The first attempt, the Code of Conduct for business taxation, should prevent the introduction of new fiscal measures that could influence the place of investment, such as tax measures which provide for a significantly lower effective level of taxation (including zero taxation) than those which generally apply in the member countries in question (eg granting special advantages only to nonresidents, providing rules for calculating the profits of multinationals which deviate from OECD rules and less strict application of tax regulations by tax authorities). The Code of Conduct provides for a review process to determine which potentially harmful measures are actually harmful. These measures are required to be rolled back (in principle by 31 December 2002). The imposition of any new measures is prohibited via a standstill clause, that is, member states will refrain from introducing new harmful measures.

The second attempt, that of the OECD (1998b), provides guidelines on factors involved in identifying tax havens<sup>78</sup> and harmful preferential tax regimes<sup>79</sup> in OECD member and nonmember countries. The OECD went further and published a list of preferential regimes (OECD 2000b:13) and uncooperative tax havens (OECDc 2000:17). The OECD Council approved these reports, with obvious abstentions from Luxembourg and Switzerland. An extensive list of possible defensive measures as a common approach for EU member states was given with regard to uncooperative tax havens (OECDc 2000:25). These included ways of penalising tax havens that did not cooperate with the OECD's set of rules regarding international taxation, and ways to motivate OECD members to refrain from using these uncooperative tax havens. The process of penalisation includes the disallowance of credits, deductions, exemptions, and other allowances to these tax havens, the adoption of CFC rules by all OECD countries, and the overall enhancement of the exchange of information. The EU is thus pushing for the conclusion of directives on the taxation of cross-border interest, royalty payments between corporations and savings, and the adoption throughout the EU of international accounting standards as a preliminary step towards harmonisation. This is seen as part of an "increasing global intolerance of preferential tax regimes". However, this argument, as well as the concept of "harmful" tax competition, seems questionable.

<sup>78</sup> These factors include no or low nominal taxes; lack of effective exchange of information; lack of transparency; and no substantial activities.

<sup>79</sup> These factors include no or low effective tax rates; "ring fencing" of regimes (regimes that protect the sponsoring country against its own tax incentives, eg benefits are restricted to nonresidents or corporations that are prohibited from establishing in the local economy); lack of transparency; lack of effective exchange of information; an artificial definition of the tax base; failure to adhere to international transfer pricing rules (OECD 1995); foreign source income exempt from residence country tax; negotiable tax rate or tax base (eg exclusion from the sponsoring country's CFC regime); existence of secrecy provisions; access to a wide network of tax treaties (this may involve abuse if all rules are not clearly defined regarding residence, anti-abuse provisions and effective exchange of information); regimes that are promoted as tax minimisation vehicles (for instance the use of promotional material in advancing the area as a tax benefit); and a regime that encourages tax-driven operations or arrangements (eg a tax address is provided with no substantial activity).

The concept of “harmful” tax competition has a limited application according to the definition used by the OECD. In this regard, issues such as the state aid of member states that can be disguised as tax measures, also become important. Section 87(1) of the Treaty of Rome states that “any aid granted by a member state or through state resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between member states, be incompatible with the common market”. This could also pertain to new rules on “harmful” tax competition. Certain criteria must be met before a tax measure constitutes state aid<sup>80</sup>. These mainly require the determination of the common taxation system within a jurisdiction in order to assess whether the tax measure in question favours certain undertakings, or the production of certain goods in the member state by the provision of an exception to the common tax system. Member states have to submit annual reports of their existing state aid systems and notification of all plans to grant and alter aid to specific corporations or sectors to the EC. If there is a breach of the state aid regulations, member states are required to recover the aid and they may also be required to amend and abolish their aid measures. These EC powers, if pursued aggressively, could affect member states’ sovereignty in tax matters in the future.

Home state taxation (HST) or formula apportionment has been proposed to prevent the loss of sovereignty. This system allows a corporation’s headquarters in one member state to adopt its national system, applying it to its branch and subsidiary activities in other member states. The tax base for all operations of a corporate group is calculated according to the rules of the adopted national system, and then divided among and taxed in each member state, in which the group performs activities. A common tax system throughout the EU is therefore not required, and sovereignty remains intact. It does, however, require that each member state show the structure and administration of its corporate income tax systems when joining the EMU. These members therefore have to conform to certain broad parameters similar to the set convergence criteria.

The concept of “harmful” tax competition can be misleading, in that it implies that other forms of tax competition are not harmful. In the UK, for instance, France and Germany’s recent gradual reduction of their corporate tax rate would not be seen as harmful as a move to gain a competitive advantage over other countries. It is also not definite whether this tax competition would constitute a welfare loss. In fact, marginal effective tax rates (as pointed out earlier), as well as the revenue derived from corporate taxes, have remained relatively constant as a share of

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<sup>80</sup> These criteria are set set out in a Commission Notice 98/C384/03 which supports the EU Code of Conduct.

GDP (OECD 1998a). These taxes are only a part of taxes on “other factors”, which according to the EC (1997), have fallen against taxes on labour income, which have risen. A further misconception is that the increasing taxes on labour income and falling taxes on other factors are likely to have resulted in higher unemployment. With highly mobile international capital markets (secs 2.3.2.1 and 3.4), the burden of source-based capital taxes, however, is likely to be shifted onto relatively immobile factors. This occurs because the international investor demands a higher pre-tax rate of return from his/her investment in a particular country (or the EU), so that the after-tax return is equivalent to that which he/she could earn elsewhere. This is likely to result in lower real investment (the marginal product of capital in the country or the EU must be higher), and thus, lower wages and lower employment (see sec 2.3). By contrast, a revenue-neutral (neutral equivalence theorem) switch to a tax levied directly on labour, would remove this negative impact on investment and raise national welfare, not implying that taxes on labour have no impact on employment (see Varian 1999).

With the above paragraph in mind, the proposal of a withholding tax on interest payments to EU residents, and the abolition of withholding taxes on interest payments between associated EU resident corporations, may also affect nonresident EU investors (see sec 4.4.3). International investors investing in the EU require an after-tax rate of return equal to an amount they could earn elsewhere. Any withholding tax levied on such investors will require an increase in the interest rate to compensate them. This withholding tax will therefore not be levied on income accruing to non-EU investors (Hauflier 1993). It is therefore unlikely to result in increases in the interest rate in the EU. The incidence of the tax burden will therefore resort to EU residents, specifically the small saver, for whom it is costly to put his/her savings outside the EU. Larger investors will, however, shift their activities outside the EU, which may have more serious consequences for the EU's financial sector.

The proposed withholding tax is in sharp contrast to the traditional way of taxing corporate profits (equity income) primarily in the source country, and interest income (exempt from corporate tax) in the residence country. This may also lead to further distortions in the financing behaviour of European corporations. As pointed out earlier, the traditional distinction between equity income being taxed on a source basis, and debt finance on a residence basis, has in any event become difficult to maintain because new financial instruments, (DFIs) which blur the distinction between debt and equity, have become more widely available.

A tax base that does not discriminate between or distort the choice between, debt and equity could be the long-term solution. Other proposals regarding capital income taxation and the pursuance of subsidiarity and neutrality in the EU concern the following: (1) CTs should distort the choice between profit retention and profit distribution as little as possible (see also sec 3.4); and (2) the need for concerted coordination should be kept at a minimum (Bovenberg & Cnossen 1997:172). In terms of (1), it is important to mention that Germany's tax reforms which started in 1999, for instance, reduced corporate tax rates, but the system still discriminates between profit retentions (remained at 30% in 1999) and profit distributions (reduced from 45 to 40% in 1999) of German corporations.

The higher taxes on profit distributions (dividends) stimulate profit retention and reduce the amounts of capital becoming available on European capital markets, hampering the development of EU share markets. The goal should actually be to reduce the overall burden on new expanding businesses and individual investors. Established firms should therefore face a relatively higher tax burden, because these institutions (banks included) normally face lower effective tax rates because of protective regimes against foreign takeovers. Foreigners therefore do not have the same easy access to bank finance. Furthermore, inconsistent transfer pricing regimes with profit-shifting policies (eg through tax havens), and easy access to derivative financial instruments (DFIs), lower the effective tax rates even further. The tax burden should not rise on average. If the reform is revenue neutral, average tax rates could be allowed to fall because of overall efficiency gains. The simplification of capital income taxes can therefore improve overall administration and accumulate higher revenues for EU members.

The following reforms for capital income taxation are suggested for the EU (see sec 3.4.1.5)<sup>81</sup>:

- (1) The double taxation of dividends should be prevented, and dividend income should be exempt from PIT. Corporate income should therefore be taxed in full at the source (ie without a deduction for dividends paid), but dividend income is not taxed in the hands of the shareholders. The latter statement applies regardless of whether the shareholders are corporations, institutional investors or individual shareholders – in other words, a scheduler income tax without overall progressivity is applicable. Dividends should be only be allowed to be distributed free of tax if profits have been subject to the CT. A compensatory tax on exempt profits available for distribution should complement the dividend exemption.

- (2) The exemption of interest income should be avoided. This means that interest income received on debt used in business should be exempt from the PIT, but at the same time, the deductibility of interest in calculating taxable corporate profits should be abolished. Interest income should therefore be taxed at source, and once again, a scheduler approach that could limit the incentives for thin capitalisation and other types of tax arbitrage and increase the tax burden on debt instruments held by institutional investors, should be emphasised. Such an effort would, however, have to be accompanied by the cooperation of, most notably, the US and Japan, in order to prevent tax-induced capital flows from raising the cost of capital in the EU.

Moreover, it is clear from the above-mentioned reform that a scheduler approach is suggested where capital income is treated separately from labour income and a comprehensive business income tax (CBIT) emerges (see sec 3.4.1.5). Under the scheduler system suggested here for the EU, capital income would be taxed at a uniform rate, while labour income would continue to be taxed progressively. The top marginal rate on labour income, however, should not deviate too much from the CBIT rate in order to avoid income shifting between labour and capital income.

As pointed out in section 3.4.1.5, literature seems to favour a source-based tax similar to that of a CBIT. This tax also seems to be able to ensure neutrality and subsidiarity sought by the EU. International taxation is, however, currently based on net income. The CBIT which is essentially based on gross income would avoid double taxation of dividends and the effective exemption of interest income because it would be taxed at corporate level. Those countries that generally implement the source principal, and thus also capital-importing countries, would welcome a unilateral adoption of such a tax because it would expand their tax base. However, the opposite is true for residence countries. Although the source-based CBIT should work in the EU, it remains unclear whether current taxation laws in countries implementing the residence principle would be adjusted to make provision for foreign tax credits on this tax. This argument applies to any new type of capital income or corporate tax system implemented.

Alworth (1999:417): - suggests a "...near impossibility of applying a source-based gross withholding tax (as suggested for the EU on interest income) to many DFIs ... and the possibility that taxpayers may seek to disguise otherwise-taxable transactions as DFIs for the purpose of avoiding tax at source". It is therefore significant to note that some countries would be left out of

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81 These proposals are based largely on Cnossen (1997).

EU and OECD agreements, and that an alternative would have to be found. Note also that these agreements, especially on harmful tax competition, were later adopted by the multilateral agreement on investment (MAI), but that the negotiations on the MAI failed (UNCTAD 1999/2000). An international tax association or a "GATT for taxes" could rather support individual countries (through the exchange of information among them) to implement the residence principle, possibly with some elements of source-based taxation, with credit for foreign taxes paid (see Tanzi 1995; Mintz 1998). Such an organisation could also deal with cross-border environmental spillovers and other international externalities, tax arbitration among countries, technical assistance on fiscal matters, accounting standards for tax purposes, and so forth (Tanzi 1999). This organisation could also incorporate the work of all world bodies on taxation, for instance, the World Trade Organisation (WTO) on trade matters, the UN and UNCTAD on investment matters, the IMF, the OECD, the EC, and so forth.

Apart from the problems discussed thus far on capital income taxation, the EU is also planning an enlargement with various Central and Eastern European Countries (CEECs). The next section provides a brief summary of the developments in the enlargement.

#### **4.5.2 The enlargement of the EU**

One of the considerations included in a document of the EC, termed Agenda 2000, is the enlargement of the EU. The impact of the envisaged enlargement on the EU as a whole, and the financial framework from 2000 to 2006, is discussed<sup>82</sup>. This document was submitted to the European Council in July 1997 and also outlines the development of EU policies beyond the turn of the century. A small group of countries was chosen to engage in negotiations on accession treaties (as agreed upon in 1994 by the European Council). These countries include the Czech Republic, Poland, Hungary, Slovenia, Estonia and Cyprus. The EC puts the possible economic gains of an enlargement of the EU with CEECs first and foremost. As a rule, new members of the EU are obliged to adopt in full the so-called *acquis communautaire* (standing legislation, rules, instructions and understandings).

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<sup>82</sup> This document (submitted in 1997) outlines the development of EU policies beyond the turn of the century. In terms of financial policy, it proposes the maintenance of the overall expenditure ceiling at 1,27% of European GNP while developing the EU's policies. Other measures included, are the development of EU internal policies in favour of growth and employment by focusing on certain spending functions such as transport, R&D, and education and training, environment-friendly technologies, and measures that support small business. Agenda 2000 also aims at improving the effectiveness of EU structural policies from 35 to 40% of the EU population rather than 51% with some exceptions.

CEECs hold new opportunities for MNCs, for instance low production costs whilst being close to major markets such as Austria, Germany and Italy. In addition, the overall foreign flows to CEECs have been rather small and concentrated. The United Nations (1996) reports that in 1995 the flows to and stocks of FDI in the Czech Republic, Hungary and Poland together were about two-thirds of the total foreign investment in CEECs, which comprises 25 countries including Russia. The former three countries are OECD members. The candidates considered for accession to the EU are Poland, Romania, the Czech Republic, Hungary, Bulgaria, Slovakia, Lithuania, Latvia, Slovenia, Estonia, Cyprus, and Malta<sup>83</sup>. Although Turkey, an OECD member, has been excluded in the Treaty of Nice (2000) it will also probably become part of the group sometime in future. Although these countries will have no difficulty complying with the *acquis* part of taxation, such as upward funding in the EU<sup>84</sup>, other differences still exist that might exacerbate taxation problems already prevalent in the EU.

Intergovernmental differences, commodity tax differences (cross-border shopping with tax differentials) and capital income tax differences seem to be significant between the CEECs and the EU. Groenendijk (1998) emphasises that the main problem with VAT will occur in some of the countries (in this case the Czech Republic, Estonia, Hungary, Poland and Slovenia) bordering on some EU members, notably Germany. The effectiveness of VAT administration in the transition economies of the CEECs is also questioned. Whilst the VAT rates of future members are not excessively high in comparison with the EU-15, they diverge from the relatively low VAT rate in Germany, which could lead to VAT revenue losses for the bordering countries. In terms of capital income taxation, the acceding countries would not diminish tax coordination problems in the EU, but complicate it even more, with too much tax diversity. Further problems could relate to Malta and Cyprus which are commonly known as tax havens, with the former bordering on Italy and the latter on Turkey. The enlargement of the EU would, inter alia, entail a direct influence on the availability of structural funds to poor countries in the region (see appendix D.3).

#### 4.6 TAX COMPETITION VERSUS COORDINATION WITHIN A FISCAL FRAMEWORK

The main question that arises is whether a future economic union such as the EU should have a

<sup>83</sup> It seems as if the recently adopted Treaty of Nice (2000) will make the enlargement less complicated with national vote totals set for the members wishing to join. The final agreement about the accession still has to take place.

central fiscal authority and thus coordinate fiscal policies. The possibility of tax externalities, such as tax competition and the use of “taxiffs” by members still remains a possibility within the Economic and Monetary Union (EMU) framework. Under a common currency, tax competition could increase for at least two reasons. Firstly, tax-inclusive prices would become more transparent. Secondly, with the loss of the monetary and exchange rate instruments, the role of tax policy in attracting business and enhancing competitiveness would become prominent (Cangiano & Mottu 1998). A stronger role for tax coordination (in particular harmonisation on a high enough rate that government tax revenues are not adversely affected) could be a possible response to prevent tax base erosion which could lead to fiscal imbalances. In this regard, Sinn (1990b:489) argues that it might be preferable to allocate Europe’s scarce resources according to the principle of comparative economic advantage, instead of the principle of tax minimisation. Countries recognise the movement of factors and adjust their tax rates accordingly, and over the long term, competition for these resources will lead to bidding down of rates and an automatic return to equilibrium or convergence, even without coordination. If tax competition were to exist, the only preference that would be the one favouring the lowest tax rate, thus limiting the scope for financing (except by benefit taxation) otherwise desirable fiscal spending at national level.

Another reason for the coordination of fiscal policies is the externalities that cause uncoordinated policies to be sub-optimal as explained earlier (see chs 2 and 3). This occurs if the benefits of public services extend across national borders, if there are increasing returns to scale in the provision of public services, or if there are macroeconomic spillovers from fiscal policies. The experience of the federations, such as Canada and the US, can help to shed some light on the importance of both tax competition and the lack of coordination of government spending policies. Subnational governments in both Canada and the US exhibit continuing substantial differences in tax rates on personal income and goods and services, possibly because relative prices, including the price of land (Tiebout 1956) adjust, or because different tax rates are associated with different levels of services, including infrastructure. It could be argued that the remaining pressure towards low taxes resulting from competition is a salutary force, helping to keep governments honest by providing some choices to citizens (Buchanan & Musgrave 1999). In specific areas, however, the absence of either coordination among US states or federal programmes has prevented the creation of arguably welfare-improving policies, for instance universal health care in the US.

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84 Slovenia, Cyprus and Malta are classified as high-income countries by the World Bank.



Tanzi (2000) argues that increasing globalisation will lead to a widespread cutback and redesign of social protection. From here the legitimate concern is that increasing mobility will lead to limits on social security programmes in Europe, although it is argued that this could be beneficial in making leviathan governments more responsive. In the absence of a consensus across Europe about the desirable features of social security, it may be difficult to achieve enough harmonisation to prevent competition toward the bottom from operating. This could jeopardise the ability of those countries wanting to operate more generous programmes than the average, and might even lead to a downward spiral, to levels that no country would consider first-best (see Sinn 1990b). In terms of spending policies, US states have little scope for discretionary fiscal policies, whereas Canada's provinces have greater fiscal powers, and have at times had substantial budgetary imbalances with reference to it as a "tax jungle"<sup>85</sup>. It does therefore seem that the lack of coordination within Europe could cause some problems, especially as a result of the larger countries' fiscal policies.

The EMU policy framework is therefore still closer to a federation than a pure monetary union, although it is one of coordination of fiscal policies as opposed to one of a federation comprising a central fiscal authority (see Bureau & Champsaur 1992; Cangiano & Mottu 1998). However, the EU as such, still appears to be closer to a confederation of independent states (with distinct cultures, languages, and political and legal traditions) than a federation, despite the extension of the majority vote to an increasing range of policy issues (Treaty of Nice 2000). Although federations have evolved towards centralisation, several features of the existing EU framework aim in the opposite direction. The subsidiarity principle, in particular, may have counteracted the centralising tendencies that exist in most "mature" federations (Hemming & Spahn 1997). The small central budget did not provide the EU with an effective authority for any of the basic fiscal policy functions; on the contrary, it has made it dependent on its members' willingness to transfer powers and spending responsibilities. Dhillon, Perroni and Scharf (1999:263) suggest that rules are inadequate to deal with tax competition. Granting discretion to the centre could be an essential ingredient of an effective fiscal coordination arrangement within the EU and other common markets. Redistributive pressures in the case of heterogeneous regions could be dealt with through bargaining, but bargaining cannot overcome incentive-related constraints in these regions (see appendix D.2). This means that incentive compatibility requirements will generally affect not only the choice of coordinated rates in states where jurisdictions are different, but also

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<sup>85</sup> Provinces faced different cyclical positions in the 1980s, and Ontario's expansionary policies in particular contributed to an appreciated real exchange rate that added to the recessionary forces affecting other regions.

the choice of harmonised rates in states where jurisdictions have identical preferences for public consumption. Tax competition can thus survive in disguise, even when fiscal policies are coordinated, but only when information is public or verifiable.

In section 3.6, a few guidelines were provided to prevent or internalise tax externalities such as tax competition, tax exporting and “taxiffs”. These relate to

- (1) an adequate provision of public goods by foreclosing free riding and shirking, establishing also allocative efficiency and macroeconomic stabilisation
- (2) a fair interpersonal distribution of the tax burden and a fair intergovernmental distribution of tax bases, that is, redistribution where needed
- (3) locational tax neutrality
- (4) permitting fiscal diversity.

The first objective has only recently become an issue in relation to tax competition (see sec 4.5.1 and appendices D.2 & D.3). As the spatial incidence (actual or perceived) of public goods<sup>86</sup> widens, and new externalities develop in conjunction with economic integration, a central or supra-national intervention might be superior to the existing national or bilateral intervention. In the same breath, decentralised fiscal policies may not provide the degree of macroeconomic stabilisation required by the EU, and consequently the euro area. Preventing the negative effects of excessive tax competition would therefore definitely require an active role at the centre as the region becomes more integrated. Linked to this and the second objective, the present limited scope of supra-national (central) redistributive policies<sup>87</sup> may have to be expanded, especially with the current budget’s financial framework running out in 2006. With the accession of other countries, the adjustment of CAP and regional and structural funds will also become necessary.

The third objective of tax neutrality, and with it tax coordination, has been predominant in the EU, especially with regard to commodity taxes, by means of EU directives. The fourth objective of fiscal diversity has therefore largely been addressed in terms of commodity taxation but still prevails within capital income tax systems in the EU. Although enhanced fiscal coordination

<sup>86</sup> Defence, security, foreign policy, environmental policy, higher education, research, technology, transportation, telecommunications, and energy have already emerged as European public goods (CEPR 1993).

<sup>87</sup> The second objective has largely been dealt with by member states themselves as far as capital income taxation is concerned, by conducting tax treaties (see sec 4.4). The VAT base has largely been harmonised without any distributional problems for members individually because the transitional credit/invoice-mechanism has been successfully managed with tax neutrality for the members. It has, however, been argued that if EU member countries intend to drop all fiscal controls and make tax administration more effective and simpler, the new origin-based VAT with more sovereignty for members (also guaranteeing tax neutrality with harmonised rates) has a role to play in that mechanism by means of a clearing arrangement through national accounts.

may therefore satisfactorily address all of the discussed objectives in the short term, and the present flexible fiscal and economic framework may be sufficient in the short and medium term, a more active central role for long-term allocation, redistribution and stability needs may become imperative.

#### 4.7 SUMMARY

The main aim of this chapter was to compare the different tax practices, specifically tax competition and coordination regarding commodity taxation and capital income taxation, in the EU and the five largest OECD federations, namely Australia, Canada, Germany (an EU member), Switzerland and the US. These federations seem to be much more centralised than the EU which has adopted an upward-funding approach for its supra-national budget.

The main difference between the EU and the federations is that the latter have overarching national authorities to oversee fiscal issues. Although these federations are far from infallible, valuable lessons can be learned from their commodity taxation (mostly on a destination basis). In this regard, the dual VAT system applied in Canada resembles the so-called “comprehensive VAT” or CVAT and is more uniform, with national and subnational tax administrations cooperating rigorously. This also resembles the tax-sharing option (specifically the so-called *gewerbesteuer* or local business tax) in Germany although here mutual trust and a high degree of negotiation between the different levels of government are necessary. The cooperation and exchange of information helps to alleviate administrative difficulties normally associated with the destination principle (residence principle). The residence principle on interest income is normally accompanied by the exchange of information between national and subnational tax authorities, and in this way helps to alleviate administrative problems, tax competition and tax evasion. The federations utilise subnational corporate income taxes based on the apportionment or allocation of income. However, this method which may assist or replace transfer-pricing regimes, is not without problems. The Canadian example is by far more uniform between the provinces and serves as the best example in this case.

This chapter emphasised that a greater degree of power or discretion for supra-national authorities within the EU could solve various problems such as information asymmetries and time lags in decision-making. This, however, seems inconceivable with EU members “preserving” their fiscal sovereignty through the Maastricht Treaty. For instance, a higher degree

of power may be needed in the case of VAT, especially if it transforms into the proposed origin-based VAT with national accounts clearing. This proposal also ties with a broadening of the tax base, that is, VAT on consumption as well as investment goods (which are currently excluded). Although the current destination-based (credit) VAT system is running fairly smoothly, it is not without problems. It also seems unlikely that EU members will adopt the proposed origin-based VAT, whilst the issues of acceding members are still unresolved. The proposed origin-based system could exacerbate problems even further, especially if it is not correctly applied and rates are not harmonised.

The EU has generally had a spontaneous excise and VAT harmonisation mechanism without any intervention from supra-national authorities. At this stage, expenditures in the EU relate to the alleviation of spillovers and/or economies of scale. To cover these expenditures, the mechanism of VAT sharing has been developed as part of the upward-funding approach (appendices D.1 & D.2). The possible externalities arising from tax base sharing (secs 2.5 and 2.6) are prevented by mechanisms such as the call-up-rate and the GNP-ceiling. Moreover, the institutional framework of the EU, which is basically intergovernmental, ensures that decisions on the EU VAT rate are coordinated. These mechanisms may, however, be overstepped once a member has joined and supra-national intervention may become necessary in the future, especially in the case of capital income taxation. Capital income taxation varies considerably more than commodity taxation in the EU, and tax exporting, as described in section 2.6, is still a major problem in the taxation of capital income.

Tax exporting, that is, the right to tax has been apportioned (via border tax adjustments and similar administrative measures) between origin and destination states on commodity taxes but is a recurrent problem on capital income taxation. There is substantial discrimination between resident and nonresident taxpayers in the EU. Bilateral agreements have assisted in alleviating this problem. Solutions have been found for corporations that reside in more than one member state (parent-subsidary corporations, corporations with permanent establishments, etc.) at supranational level via explicit EU directives. The effects of tax exporting as a tax externality, that is, the oversupply of public services is, however, to a certain extent, counteracted by horizontal tax competition, which entails an undersupply of public services.

Tax competition has recently become a major issue in the EU. The EC and the OECD have started with a unilateral attempt to eliminate "harmful" tax competition such as tax havens and

preferential tax regimes. It is, however, questionable whether all these practices are as harmful as suggested. What of the possibility of some EU members undercutting one another in setting tax rates? Tax competition has been addressed in the field of commodity taxation through the setting of minimum rates in the EU. The alignment of capital income or corporate tax systems, especially tax bases, has become necessary (sec 4.5), but the imposition of minimum and maximum rates within the field of capital income taxation, as suggested by the Ruding Committee and adopted by the European Commission, overshoots the problem. Tax competition leads to a revenue loss to a high-tax country, which should be enough incentive to not set rates above other member states. Minimum rates could, however, prevent it becoming a “race to the bottom”.

It has been suggested that tax coordination in capital income taxation in the EU should follow the VAT example, where both internal and external neutrality, that is, a restricted source principle, should apply. Although an adoption of a source-based (gross) CBIT could essentially address double taxation of dividends and problems concerning the exemption of interest on debt, it is questionable whether this type of tax with tax credit provisions would be adopted unilaterally. A renegotiation of a tax treatise (sec 3.4.1.7) would be needed, whereas the problem could also be adequately solved through an international tax association that could assist in information problems (residence principle) and thus serve the needs of both developing and developed countries.

The chapter concluded with an integrated approach to tax competition and coordination within a fiscal framework. It is argued that the EU will definitely require a more active or discretionary role from the supranational authorities, if effective long-term allocation, redistribution and stabilisation of resources are to be achieved. This does not mean that it is necessarily the case for Southern Africa that will be discussed in the next chapter.

The next chapter will elaborate on this chapter by discussing experiences in the developing world. The focus area will be Southern Africa. Problems relating to tax competition, especially commodity and capital income taxes in the more “developed” federations such as Brazil, Argentina and India, will be compared with the Southern African Development Community (SADC). The degree of tax competition will therefore be discussed extensively within a futuristic framework. Because developing countries differ extensively from developed countries, especially in a macroeconomic sense, it is also vital to analyse the consequences of tax

competition within this framework. Future issues, such as fiscal allocation, redistribution, and especially macroeconomic convergence and stability in Southern Africa, will therefore also be included in this analysis.

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## **CHAPTER 5**

### **COMMODITY TAX COMPETITION AND MACROECONOMIC STABILITY IN SOUTHERN AFRICA**

#### **5.1 INTRODUCTION**

The World Bank (1991) has expressed concern about tax competition and harmonisation in developing countries. This specifically includes competitive responses from other countries to incentives (tax holidays, accelerated depreciation, tax credits, and favourable resource royalties designed to attract foreign capital) used in developing countries. Unexplained phenomena relate to the effectiveness of these incentives to attract foreign capital and trade as well as the side effects of these incentives, eg tax discrimination, to induce or limit growth. The need for developing countries to harmonise taxes among themselves through multilateral and bilateral negotiations is therefore, again emphasised, as discussed in chapter 3. Apart from finding sensible explanations for problematic tax practices, a continuous attempt is also made to find long-term macroeconomic solutions. The emphasis falls on Southern Africa, that is, the Southern African Development Community (SADC).

An African renewal has been postponed for many years. With the advent of the new millennium, President Mbeki of South Africa referred to this renewal as an “African Renaissance”. The Millenium Partnership for the African Recovery Programme (MAP 2001) led by Mbeki, Obasanjo of Nigeria and Boutefilka of Algeria, and the OMEGA Plan (OMEGA 2001) proposed by President Wade of Senegal, can therefore be seen as a welcome change to previous efforts. At this special summit meeting of the heads of state and government in March 2001, the need to make provision for a new streamlined structure for the SADC in order to speed up its economic integration and cope better with the crisis in the region (eg the war in the DRC), was also recognised. Some of the proposed changes sought to create legal structures that would adjudicate issues of trade and economics that would not suit the interests of individual members. The aim of the reform process is to address the fears of smaller economies and to accommodate their aspirations and interests. The World Bank (2000:34) points out that both “winners and losers (and more of the former than the latter)” should be recognised as the first step, although the persuasion of the winners to forgo some of their gains to compensate “influential losers who could otherwise stymie the process” should form part of trade and investment reform.

Although the SADC has gone beyond the initial stages of an FTA, tax competition and coordination problems as such have not yet surfaced. The possibility of a higher degree of economic integration may yet expose these in future. At the same time the formulation of macroeconomic convergence criteria for this region has become essential and this should be dealt with within the confinements of certain tax restrictions. The intention is therefore also to be proactive and investigate future possibilities in terms of tax competition and coordination strategies for long-term macroeconomic stability in the region.

The emphasis in this chapter is not specifically on trade or the revenue implications of free trade because various studies have already been conducted in this area (see sec 5.4). The purpose here is to take the lead and investigate the future tax implications of further integration. An additional consideration is whether tax competition has truly become a dilemma and/or whether the current situation can be used to the benefit of all SADC members. The idea is to form an integrated approach of what is needed in terms of both commodity and capital income taxation to reach a workable long-term solution in terms of macroeconomic stability.

In this chapter a different approach is followed to the one in chapter 4, different in the sense that the EU has already progressed much further with economic integration than the SADC, and as such, the latter still needs to formulate macroeconomic convergence criteria that will suit its taxation structure and hence fiscal policy. This chapter therefore attempts to analyse experiences in the developing world with cross-references to lessons that can be learned from developed regions (ch 4). In this context, the first section provides a short background study of fiscal decentralisation and hence also the institutional character of the more “developed” federations in the developing world, namely Argentina, Brazil and India in comparison with the SADC. As pointed out on numerous occasions, deeper integration means increased exposure to the consequences of the removal of barriers to trade and factor movements and the experiences of selected federations can provide useful lessons. Argentina, however, is a unique case study, and is included because of its successes with institutional reform during the 1980s and 1990s. On the downside, it is also included to show the effects of fiscal insustainability on macroeconomic stability<sup>88</sup>. The second section provides an overview of economic and regional integration in Southern Africa including important macroeconomic indicators for this regions and trends in international taxation to form a comparative and summarised perspective of developing as opposed to against developed regions. The third section emphasises the current character of and



changes in commodity taxation that could occur in the future. This chapter should therefore be regarded as an introduction to chapter 6, which continues with taxation and other policy issues relating to the design of a macroeconomic strategy that involves convergence criteria suited to the future financial needs of this region.

If not otherwise mentioned, data and statistical resources utilised in this and the next chapter are mainly from the Finance and Investment Sector Coordinating Unit (FISCU), the International Monetary Fund (IMF), the National Treasury of South Africa (NTSA), PriceWaterhouseCoopers (PwC), and the World Bank (WB). Various problems arise when one tries to analyse data from developing countries. In the case of African studies, Burkett, Humblet and Putterman (1999) state that the main problem is the unreliable nature of the available data. Different variables may be recorded for the same observation, in different editions of the same source. The IMF (1998) warns that the results obtained by using data should be interpreted with caution. Before proceeding, it is therefore important to shed some light on the international status of developing countries in terms of taxation.

## 5.2 FISCAL DECENTRALISATION WITHIN FEDERATIONS AND THE SADC

Argentina and Brazil, two of the largest federations and democracies in Latin America, have been chosen as examples. Together with sub-Saharan Africa (SSA), Latin America has the highest number of regional groupings in the developing world, often with overlapping membership and objectives ranging from limited cooperation in specific areas to full-fledged economic integration (see appendix A). Furthermore, Latin America has had significant tax reforms since the 1980s with substantial growth in FDI inflows during the 1990s as well as macroeconomic instabilities.

India, the largest democracy in the world, has a long history in federal finance and has been chosen as the representative of the Asian region. South, East and South-East Asia are currently attracting most of the FDI inflows to developing countries worldwide (UNCTAD 2000) with China at the forefront. The region becomes even more interesting if one takes taking the effects of the financial crisis of 1997 into account, but at the same time realising the advantages of global production networks and attracting most of the parts and components trade worldwide (see World Bank 2000:66). Africa, which is still struggling to become a major market player, can

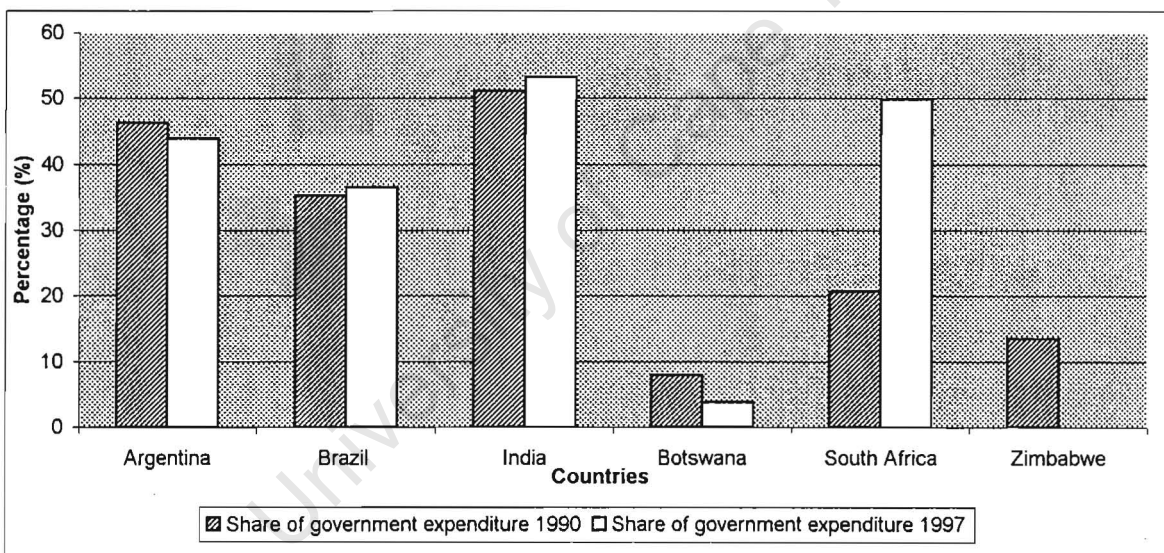
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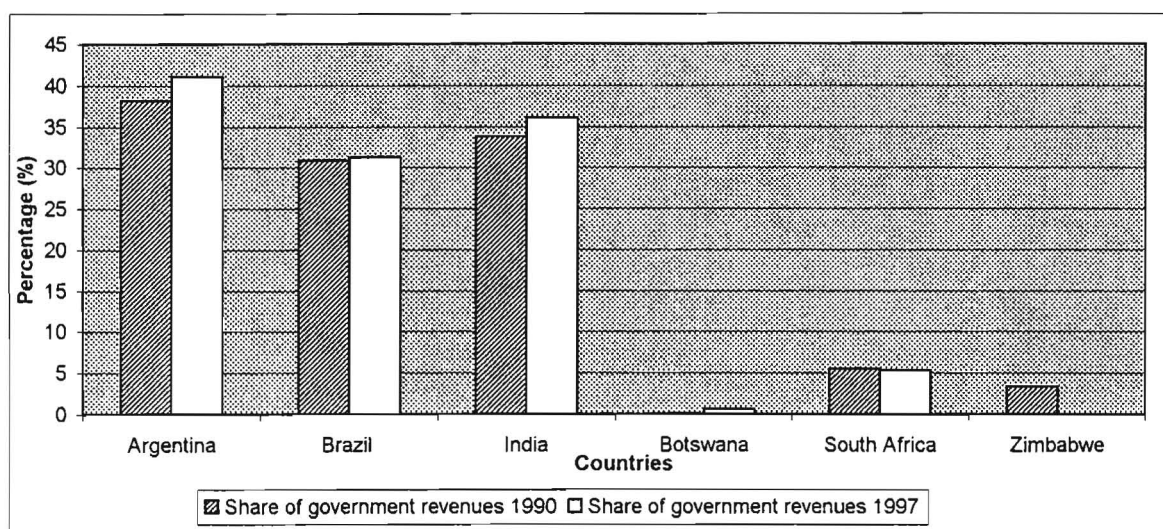
88 Argentina's foreign debt soared to \$149,7 billion in 2001 (The Economist 2002:85).

therefore learn from these and other experiences which are also unique in terms of subnational commodity taxation in Argentina, Brazil and India. In the following Sections, fiscal decentralisation which is that is prominent in the three federations will be discussed and where possible compared with the SADC. Although fiscal decentralisation is not yet relevant to the SADC which still has a long way to go before being transformed into a common market or economic union, it lays a foundation and provides a summary of what these economies could become together or individually.

Figure 5.1 provides a summary of the fiscal decentralisation features in the federations in question and those members of the SADC which possess actual components of decentralisation. The table provides only a glimpse at the degree of fiscal decentralisation and further discussions should shed some light on the different countries' tax and expenditure legislation.

**Figure 5.1: The composition of subnational shares in selected federations and the SADC**





Source: See Table B.4

Latin America has had a long tradition of centralisation, which dates back to the period of colonial administration. After the independence movement, centralised fiscal structures remained in place, partly because of colonial inheritance, and partly because of the need for countries to keep distant provinces under one power. Even today, when compared with the industrialised world, the region as a whole remains highly centralised. While subnational levels of government are responsible for over 35% of total government expenditure in industrialised countries (see section 4.2), on average, in Latin America the corresponding figure is less than 15% (Stein 1998). The latter, however, does not refer to the federations within Latin America (fig 5.1). Although the region remains highly centralised, the tendency towards decentralisation is quite strong.

In Latin America, revenues were traditionally decentralised before expenditure responsibilities, and national governments therefore had to maintain spending levels with a smaller resource base resulting in large deficits (see appendix E). For instance, Argentina's subnational governments' share of total governments expenditure declined from 46,3% in 1990 to 43,9% in 1997 while the opposite happened in government revenue. The national government's share has therefore declined even further in terms of revenues. Separate tax and spending powers have allowed subnational governments to incur only a fraction of the political and financial costs of their expenditures, especially when most local resources are funded from a common national pool of tax revenues creating a commons problem. Subnational governments have controlled substantial resources (eg the subnational VAT in Brazil), and in some cases have adopted revenues from these resources as their "own". Both national government and local governments levy limited

forms of VAT but the state VAT is by far the most important of the three and it may therefore be difficult to find a solution to this problem. Although Brazil has gone a long way in the process of devolving revenue sources and expenditure functions to subnational governments and granting significant autonomy in policy making, local revenue mobilisation has hardly been encouraged by the country's system of intergovernmental transfers. A significant vertical fiscal imbalance has arisen in the Latin American region typically because more expenditure responsibilities have been assigned to local governments with limited own revenues.

The vertical fiscal imbalance has been greater than that in industrialised countries with an average of 42% for OECD members compared to 52% in Latin America. The vertical imbalance also seems to vary significantly between different countries in Latin America, and among decentralised countries the difference between Latin America and the OECD seems to be even greater. This suggests that finding a suitable tax base to assign to subnational governments is more difficult in the case of developing countries (Stein 1998:105). The high degree of vertical imbalance in decentralised countries in the region creates the possibility of a common problem, in particular when combined with highly discretionary transfer systems, or a large degree of borrowing autonomy (see sec 3.5). For instance, central bank bailouts to state banks that are "too big to fail" have been important in some Brazilian states, such as São Paulo and Rio de Janeiro. These tendencies can also be compared with tendencies in Asian economies.

The fiscal systems of East Asian economies have traditionally been highly centralised. In India, states have been granted substantial powers to tax and spend but these powers have not been properly implemented. Central government has maintained control over substantial resources and the states have had to cope with financing large spending functions with limited resources (see appendix E). However, this unitary behaviour appears to be changing gradually with a process of adjustment for states with high deficits and debt. This trend can be partly observed in an increasing tendency in both expenditure and revenue shares of subnational governments. Subnational shares have increased in terms of government expenditure (from 51,1% in 1990 to 53,3% in 1997) and with a greater but not significant amount in terms of revenues (from 33,8% in 1990 to 36,1% in 1997).

An overall summary of fiscal decentralisation in developing and developed countries provides insightful reading (see section 4.2). Subnational expenditures comprise a small share of government expenditures (the median for developing countries is about 14%), except in

industrialised countries (the median is about 34%) and large federations such as Argentina, Brazil, Canada, India, Mexico, the Russian Federation and the US (the median is approximately 45%). Experience in these countries (see sec 4.2) suggests a few guidelines for decentralisation. Firstly, in the case of developing countries, fiscal decentralisation is likely to generate imbalances at the subnational level which may lead to a deterioration of the fiscal position of the national/central government. As a result, the growth performance of these economies may be negatively affected. Secondly, mature federations and EU members have nevertheless experienced higher subnational spending shares for a much longer period than most developing countries mentioned, without significant fiscal imbalances at the centre. In these countries, more stringent control of subnational fiscal positions (applicable budget constraints with explicit transfers) seem to have prevented the deterioration of national and subnational fiscal positions owing to decentralisation.

Returning to table 5.1, most SADC members have centralised or unitary governments and are characterised in some cases by authoritarian rule and/or high military expenditures especially in war-torn countries such as the DRC. Several heads of state, for instance, those of Namibia and Uganda<sup>89</sup> (with the most recent case in Zambia) have also opted to adjust their constitutions in order to lengthen their terms of office. Data are therefore not always available or nonexistent for subnational levels. Furthermore, in a number of countries decentralisation has not yet resulted in relinquished control from the centre and this is partly related to the quality of governance at different levels. Ghana, Malawi and Zambia have each created local councils, but the national government continues to direct almost all subnational spending and management decisions. Similarly, the ruling national party in Tanzania holds almost all subnational offices. Besides Uganda, South Africa is regarded as one of the few African countries that is in a process of unification through decentralisation.

South Africa is the largest democracy in the SADC and as such is a much larger country than, say, France, Germany, the Netherlands and the UK combined, and compares well with these unitary countries in terms of revenue decentralisation. The share of subnational revenues remained relatively constant from 1990 to 1997 but increased to approximately 10%. In comparison, a substantial change has occurred in terms of government expenditures and according to the new constitution (1994), the provinces have received many more responsibilities

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<sup>89</sup> Questions were also raised about the legitimacy of the recent elections in 2001 in which the current president, Mr Museveni, was re-elected with nearly 70% of the votes (The Economist 2001).

regarding expenditure. South Africa's national government therefore has a relatively small share in expenditures (about 50%) in comparison with the European countries mentioned. This makes sense because the larger a country is, the more local governments it is bound to have. The provinces have a share of about 40% of general government expenditure but relatively little own revenue, creating the need for a large amount of downward funding (unconditional and conditional or block grants). This will probably change in the future with the South African constitution making provision for a higher degree of devolution in terms of taxes. The process and methods of implementation (either through tax surcharges or tax sharing) is, however, still uncertain and future legislation should provide clarity on this issue.

From the discussions on fiscal decentralisation, it should be clear that decentralised fiscal systems offer a greater potential for improved macroeconomic governance, if managed correctly, than centralised fiscal systems. Mature federations in the developed world are proof of this conclusion (see ch 4). Decentralised fiscal systems require greater clarity in the roles of various players (centres of decision making) and transparency in rules that govern their interactions, to ensure fair play. In the following discussion, more will be revealed about the economies of the different SADC members and the possibility of a higher degree of integration for this region.

### **5.3 ECONOMIC AND REGIONAL INTEGRATION ON DEVELOPING CONTINENTS**

The role of tax competition as part of the integration process has continuously been investigated. In the case of the EU (ch 4), it was clear that more intervention in terms of tax coordination and harmonisation would be required to cope with public needs in the future and to eliminate fiscal externalities where necessary. In this regard, the SADC situation will be investigated to clarify whether a *laissez-faire* approach would be appropriate for this region in terms of tax competition. To reiterate, here competition could lead to a natural process of tax rate convergence and thus a limitation on the growth of governments. On the opposite side of the spectrum it could lead to undertaxation and an undersupply of government services (sec 2.3), and thus a dilemma. It is therefore necessary to investigate whether this convergence, also in a macroeconomic sense, has been taking place or will take place in future.

Economic integration and ultimately globalisation have distinctive advantages (see sec 3.2). One of these advantages, the benefits of international trade, is of particular importance in developing

countries. Although growth in world capital flows has outweighed the growth of world commodity trade substantially since the early 1980s, trade is still one of the principal sources of revenue for developing countries' governments worldwide. Substantial progress has been made with the World Trade Organisation (WTO) extending membership to developing countries. Moreover, some developing countries still regard the protective regimes of developed countries as a barrier. The emphasis in developing countries should rather be on the creation of sustainable internal economies to ultimately integrate into competitive groups and take advantage of trade opportunities worldwide. It is a well-known fact that trade diversification can create familiar forward and backward linkages and ultimately extend the ability of developing countries to attract more direct investment (FDIs).

Some of the regional groupings in SSA date back to the colonial era. However, most of the integration schemes were only adopted after independence during the later 1960s and 1970s. In many instances, the groupings comprised countries that had shared colonial ties to the same foreign power because the colonial ties had created a host of common institutions, a common official language, and a common currency. One of these groupings (in the form of a tax union) was the East African Common Market, with Kenya, Uganda and Tanganyika (today part of COMESA) as members. These countries had shared a history of British rule before independence from 1961 to 1963 (see Due & Robson 1967:555). In other instances, the regional groupings, notably the larger ones, were more in line with the geographic proximity of the member countries as is the case with the SADC today.

Despite the political appeal and subsequent proliferation of regional groupings in Africa, it appears from the growth of intraregional trade shares that in most instances they have achieved little by the way of promoting regional trade integration (Foroutan 1993). On average, no regional grouping in the SSA has been successful in elevating intraregional trade beyond a negligible portion of Africa's total trade, although trade with partners may be important for individual countries. Until the beginning of the 1990s, the internal trade shares of almost every African grouping either remained constant or actually decreased to below their level prior to the formation of the groups. During the 1990s, there was a slight increase in the level, and a far greater increase in the intensity of intraAfrican trade. This result, however, is almost entirely attributable to the huge decline in the share of Africa in total world trade in the past 30 years. Although trade in goods and services grew twice as fast as the global GDP in the 1990s, and the share attributable to developing countries climbed from 23 to 29%, Sub-Saharan Africa is still

attracting a negligible portion because of these countries' high dependence on primary commodity exports. This does not necessarily apply for the SACU and SADC (see Table 5.3).

As a result, the economic development of these countries has not been realised and most African economies are marginalised in global commerce. Whilst other parts of the developing world, notably East Asian and the Pacific region, as well as the Latin American and Caribbean region, are tapping into new opportunities such as parts and components (one-third of all manufacturing trade), African countries (especially sub-Saharan Africa) are still lagging behind (World Bank 2000:33). The only exception to the rule in Africa has been the SADC. This region's success will be discussed in more detail in section 5.3.1.

Renewed attempts and interest in regional integration in Latin America gained momentum towards the end of the 1980s, after many countries experienced a period of structural adjustment and reform. According to some estimates, between 1990 and 1994 alone, 26 bilateral and multilateral trade agreements were signed among these countries. Many refer to these initiatives as "open regionalism" or "open blocs" to distinguish them from past experience of "closed blocs" (see Wei & Frankel 1998). The term indicates a preferential trade arrangement that is conducive rather than contrary to integration with the world as a whole, in so far as (1) external barriers against third countries' imports are relatively low and do not increase (or even decline in some cases) compared with those prevailing in member countries prior to the formation of the bloc; (2) regional preferences are meant to promote exports and prepare the terrain for more effective competition outside the region rather than protect import-substituting activities; and (3) a general reliance on market forces rather than centralised industrial planning and relatively little tolerance for the "special protection needs" of member countries.

It is widely believed that most of the new and resurrected versions of older Latin American regional initiatives have not only been quite successful in reorienting the region's trade towards itself, but also hold the promise of being more sustainable and cohesive than in the past (De Mello 1999). This is the result of the more liberal trade stance of the majority of Latin American countries and the growing importance of manufacturing trade, and hence increased intra-industry trade opportunities on the continent.

Regional groupings in Africa have generally failed for a number of specific reasons. Firstly, many schemes were designed without regard for members' incentives to comply. Many



countries have overlapping and incompatible membership of different regional agreements and the implementation of initiative is therefore not feasible. Secondly, members have substituted nontariff barriers for tariffs against one another to incur a competitive advantage. Lastly, domestic economic policies have undermined the effectiveness of African trade integrations schemes. Inconsistencies between macroeconomic policies and trade regimes tend to undermine trade liberalisation (ie the removal of import restrictions), whether regional or unilateral (World Bank 2000).

Trade liberalisation can have distinct advantages. When tariffs are lowered and relative prices change, resources are allocated to production activities that raise national incomes. Much larger benefits accrue in the long run as economies adjust to technological innovations, new production structures and new patterns of competition. In recent years, however, the very aim of integration in developing countries, namely industrialisation, has been reversed by (inter alia) trade liberalisation. Ocampo and Taylor (1998:1543) conclude with reference to the rapid growth experienced by the Asian economies over the past 30 years that "...the good productivity performance in the Asian economies has been associated with outward-oriented, but distinctly non-liberal trade regimes. Indeed ... their histories show that trade and other interventions are not always harmful; indeed at least in terms of economic performance, they can promote substantial good". The idea that interventions are not harmful can be linked to new trade literature (see Helpman & Krugman 1989) where the assumption of imperfect competition has led to a fundamental change from a free-trade attitude to an interventionist view.

In more recent times, the effects of imperfect competition, economies of scale and geography on trade patterns have been analysed, mainly as part of endogenous growth theory and new trade strategies. The emphasis in this literature is that a country's integration into the world economy and its share of exports in world trade are a significant determinant of its level of prosperity. As far as policy is concerned, the successful integration of a country into the world economy (an increasing export shares) is seen to require increasing competitiveness of products which may depend on strategic government intervention, for instance to enhance the productivity of domestic manufacturing firms through protection which could result in lower per unit costs and greater investment by firms in new technology. Furthermore, labour market institutions and employment growth may matter in so far as higher labour productivity growth is stimulated. This view also supports the opinion that international trade will not benefit all participants equally.

In order to emphasise an earlier statement, international trade can only benefit a few because only a few countries are capable of producing highly sophisticated technological goods and it might therefore be in the interest of a country or group of countries to concentrate market power in the hands of a single firm. Governments therefore have an incentive to use their trade policies as strategic instruments in imperfectly competitive markets. This policy is better known as *profit-shifting* and is based on the following: when exporting firms located in different countries compete in a third country's market, the government's optimal policy involves paying export subsidies (ie Cournot competition in terms of quantities) or levying export taxes (ie Bertrand competition in terms of prices) (see section 2.7). The World Bank (2000:66) reports that developing countries can take advantage of their firms' participation in global production networks but possible adverse fiscal implications should be taken into account. A large portion of the trade of these networks is generated within firms that are able to realise profits in countries with low tax rates. Although countries with high corporate tax rates could attract FDIs, they normally realise lower profits than expected. The benefits created are then partly offset by a smaller national corporate tax base, resulting in increased tax pressure on other less mobile factors of production such as labour and consumption. The SADC will therefore have to take competition strategies into account in order to tap its resources correctly, that is, an internal balance within member countries whilst concentrating on outward- or export-oriented policies, and utilising trade liberalisation measures with care.

In the next Section, the SADC members' economic stance will be discussed in more detail. This Section also has to be seen in collaboration with the last section of chapter 6. In the light of future trade liberalisation efforts, CREFSA (1998:3) emphasises that "... the credibility of a policy package and the extent of risk involved in changing private behaviour are more important than the announcement of new initiatives in isolation."

### **5.3.1 The economic stance of SADC members specifically**

Of the 14 member countries in the SADC region, eight are classified by the World Bank as low-income or least developed countries (GNP per capita < \$785 per annum) and two as lower-middle-income countries (GNP per capita between \$785 and \$3125) (World Bank 2001; see also table 5.1). The least developed countries are marked by an asterisk in table 5.2, and are considered to be highly indebted and impoverished with limited or no ability to service debt. Because of the latter, most of them are also under the administration of an IMF structural

adjustment programme (SAP). As already pointed out, the SSA region has experienced low and even negative economic growth over the past decades, even though trade has had a positive impact on overall economic growth in Africa (Burkett et al. 1999). In the 1980s, sub-Saharan Africa's average annual growth rate was 1,8% compared with an average of 3,1% in the rest of the developing world (World Bank 2000). The world's willingness to trade with the region has therefore also declined over the past decades, and these countries find themselves more marginalised in world trade than ever before.

Numerous factors explain the continent's poor economic performance. Although no single factor may be that disastrous in isolation, as a totality, they represent a recipe for economic retardation. The region has been politically unstable with frequent military conflicts, both civilly and externally, and dictatorships have in the past been the rule rather than the exception. Owing to political turmoil these economies are characterised by macroeconomic instability (Easterly & Levine 1997). Unstable economies have a higher investment risk and experience price uncertainties, which drastically reduce the inflow of investment and thus also investment-led growth (Dollar & Easterly 1999). The tropical climate of some of the SSA countries contributes to the low quality of their human resources. In tropical regions, deadly diseases are more prevalent, thus decreasing the productivity of labour. In general, the infrastructure is poor which makes transportation risky and extremely costly (Sachs & Warner 1997).

Despite the dark picture sketched for sub-Sahara Africa, there is still hope. Todaro (1997) refers to the SADC region as the most promising regional grouping on the African continent today and confirms that the infrastructure is also better than anywhere else in Africa. Furthermore, this region is regarded as the most homogenous group of countries in Africa with common colonial and cultural ties, thus facilitating the integration process (Cookcroft 1993). The SADC tended to outperform the entire continent, with the members of the Southern African Customs Union (SACU) being the main achievers.

Although hope exists amongst war-toughened countries, such as Angola and the DRC, the performance of some governments is continuously being questioned and reforms seldom materialise. Aids, for instance, reduced Zambian life expectancy from 47 years in 1990 to 40 years in 2001. Despite this, the 2001/2002-budget spends only half as much on fighting the disease as on the Presidential vote (see The Economist 2001). Although the SADC has lagged far behind other developing countries in terms of job creation and growth, "conditions for more

rapid economic growth in Southern Africa are better now than they have been for several decades” (Jenkins and Thomas, 1997:53).

**Table 5.1: Socioeconomic and macroeconomic indicators concerning the SADC, 1994-2001**

COUNTRY <sup>2</sup>	POPULATION (MILLION)	AVERAGE GDP GROWTH (1994-2000) <sup>1</sup>	GDP PER CAPITA, US\$ PER ANNUM (2000)	AVERAGE ANNUAL INFLATION (1999-2001)	GOVERN- MENT BALANCE AS % OF GDP (2000)	GOVERN- MENT DEBT AS % OF GDP (2000)	EXTER- NAL DEBT AS % OF GDP (1998)
Angola*	13	6,1	431	300	-13,1	282	181,3
Botswana	1,6	6	3749	8,3	-3,3	11	10,5
DRC*	49,7	-2,8	129	330	-0,2	232	217,8
Lesotho*	2,2	6,3	405	7,1	-6,7	52	80
Malawi*	10,8	4,6	167	34,1	-6,3	108	144,9
Mauritius	1,2	5,7	3788	7,2	-2,5	37	59,1
Mozambique*	17,5	7,6	223	4,2	-2,4	257	214,3
Namibia	1,8	3,3	1706	10	-4,5	27	4
Seychelles	0,1	1,5	6421	4,8	-0,2	20	34,9
South Africa	43,1	2,7	2929	6	-2,4	47	19,3
Swaziland	1	3,1	1515	8,3	-1	17	39
Tanzania*	31	3,7	258	15	0,2	112	89,4
Zambia*	10,2	1	315	23,2	-3,1	165	204,8
Zimbabwe*	12	2,2	600	103	-2,9	61	82,9
SADC (total)	195,2	3,6	1617	62	-3,5	102	111

Note: 1. If not otherwise specified, the table represents data that are available closest to 2001.  
2. The countries marked with an asterisk represent highly impoverished and indebted countries.

Source: FISCO (1999); IMF (2001); SADC (2001).

Although the SADC is not yet ready for further integration, especially monetary unification, Jenkins and Thomas (1997) notes that some of the smaller economies in the SADC may benefit from the expansion of foreign trade, especially with the creation of the SADC FTA. This should, however, be seen as the first step in a continuous process of trade liberalisation over time. Future export-oriented sectors and thus outward-oriented policies are likely to be growth engines because, as already pointed out, exports and consequently foreign capital do not necessarily rise automatically without trade barriers.

Regarding fiscal policy, it is obvious that a significant and sustained tightening is required (table

5.1), and that in most SADC countries, the fiscal position is incompatible with either unilateral or regional trade liberalisation. Most SADC members will therefore have to take action to restore internal balance, although countries such as Botswana, Lesotho, Mauritius, Namibia, Swaziland and Seychelles are showing signs that further trade liberalisation will be to their advantage (CREFSA 1998). The South African economy is an exception only because of its relative size in the SADC.

#### **5.3.1.1 South Africa and unresolved issues in the SADC**

Initially, South Africa was not allowed to join the SADC because of its apartheid regime and also fears that it would dominate the whole region. Finally, in 1994 when apartheid was officially abolished, South Africa was allowed to join. South Africa as such represents a unique environment within the SADC. It has the largest and most developed economy in the SADC. South Africa also has the capacity to raise its exports to the SADC without necessarily requiring large-scale investment in additional capacity (see sec 5.5). Although South Africa stands to gain disproportionately more than its neighbours from the SADC FTA in terms of an expanding two-way trade, the SADC arrangements are less important to South Africa's overall growth rate than they are to the rest of the region (Jenkins & Thomas 1997). South Africa, however, still faces the same difficulties in maximising the gains from its WTO commitments or the potential gains from any agreement such as the EU-SA FTA. It also experiences similar disparities, specifically spatial, in economic conditions (specifically also in terms of Aids) than the rest of Southern Africa.

The UN (UNAIDS 2000) expects the aids epidemic to knock 0,3 to 0,4% off the growth rate each year, making South Africa's GDP in 2010 17% lower than it would otherwise have been. South Africa is one of the countries in the SADC that has an adult infection rate of more than 10% of the population. Other countries that have the same tendency are Mozambique, Malawi, Swaziland, Zambia, Namibia, Botswana and Zimbabwe. Aids is therefore seriously impacting on already weak economies (eg Malawi, Mozambique, Zambia and Zimbabwe) and represents an unwelcome "guest" in economies that are showing signs of recovery or hope (Botswana, Namibia, South Africa and Swaziland) in the SADC. Jenkins and Thomas (1997), however, argue that governments in the SADC that are interested in improving their growth performance should specifically safeguard the environment that encourages private enterprise.

Although to varying degrees, SADC governments have been adopting regulatory regimes, including competition laws, to show their commitment to a level playing field. In various member countries, privatisation is being accelerated to introduce competition and improve the environment for private enterprise. Privatisation should, however, not occur to the detriment of the various economies. In Zambia, for instance, 248 out of 280 state-owned firms were privatised. However, questions are being raised about the proper valuation of the transactions, and corruption could be involved. This is also the case regarding Zambia's principal asset, its copper mines, which have been sold under market value to MRG, a trading firm in the Bahamas.

Two regional groupings within sub-Saharan Africa, SACU and COMESA (see appendix F.2), are of particular importance in the formation of the SADC FTA, especially because of the progress that has been made with these agreements and also their possible impact on the SADC FTA. Two elements of uncertainty emerge from the existence of SACU and the SADC. The first obvious element of uncertainty is the conflict posed by the coexistence of SACU and the SADC, both of which include South Africa, especially if the latter were to become an effective preferential regional trade scheme (a de facto enlarged SACU) with South Africa at its core. The second and a related factor of uncertainty is South Africa's ability or willingness to continue its compensation programme to the current or any future members of an enlarged SACU as well as the willingness of the other members to stay in SACU in the absence of such payments. As SACU continues to liberalise, the new revenue-sharing formula will become impractical but will also have a negative impact on smaller economies that have done little to diversify their revenue source. This and related issues will be further discussed in section 5.4 and chapter 6.

In summary, the SADC treaty (appendix F.1) recognises that underdevelopment, exploitation, deprivation and backwardness in Southern Africa will only be overcome through economic co-operation and integration. The member countries recognise that achieving regional economic integration in Southern Africa requires them to put their full support behind the SADC to act on behalf of all Southern Africans for their common prosperity, peace and unity. The cornerstone of the SADC is the vision of a shared future within a regional family. What was initially a loose association of countries has grown into a noticeable regional player, aiming to achieve regional integration as a means of bettering the lives of the peoples of the region. The SADC treaty aims to build a community of nations which are together politically and economically strong to compete in the world marketplace. The SADC aims to provide balanced economic growth and development, political stability and security for all its members. Although economic disparities

within the SADC shows that the region is not yet ready for further integration, especially monetary unification, the importance of a speedy integration process for economic transformation in the region is recognised as a matter of urgency. In the next and following Sections, taxation issues will be discussed as part of an ongoing process to achieve the different goals of the SADC.

#### 5.4 COMMODITY TAXATION AND SOME OF THE IMPLICATIONS FOR TRADE

Although in the short and medium term, the trade effects of the establishment of an FTA in Southern Africa are of particular importance for SADC members, more emphasis is placed on future issues concerning commodity taxation in the region. The liberalisation of regional trade will have definite fiscal effects with short-term loss of tax revenues, for instance those from SACU. Fiscal reform and specifically tax reform in this case, should therefore be initiated so that the already vulnerable macroeconomic position of SADC members is not exacerbated. Tax reform in this regard again entails the objectives of taxation. The distortionary influence of taxation on consumption (savings) and investment should be minimised (ensuring neutrality) whilst administrative costs should be kept as low as possible to ensure effectiveness.

The SADC technical arm spearheading trade negotiations, the Trade Negotiating Forum (TNF), has agreed on the various policies that are required to underpin the implementation of the Trade Protocol (see appendix F.1). It mainly recognises the need for harmonisation and also includes a need for macroeconomic stability. It also promotes the idea of a future common market set for after 2006. Various studies have been conducted on the introduction of the SADC FTA and its effects on Southern Africa (CREFSA 1998; Evans 1997, 1998 & 2000; Akinkugbe 2000; Roberts 2000). The conflicting effects of other bilateral agreements on the SADC are included in these studies, for instance, the likely impact of the FTA between the EU and SA on the remaining member countries of the SADC which are neither party nor signatory to the agreements. At present, the other SADC-members belong to a wider regional grouping known as the African Caribbean and Pacific (ACP) group to which South Africa only holds qualified membership because it was not regarded as a typical less-developed country. South Africa was therefore excluded from any agreements between the EU and the ACP under the Lomé Convention.

In March 1996, the EU mandate of offers to South Africa for the FTA was formally tabled and

negotiations commenced for the EU-SA FTA. Several rounds of negotiations were completed by the end of March 1999, giving rise to the Agreement on Trade, Development and Cooperation between the European Community and the Republic of South Africa of 1999. The agreement was finally signed on 11 October 1999 in Pretoria and the effective date of implementation fixed for 1 January 2000. The salient feature of the agreement is that the EU-SA FTA will be established over a transitional period, lasting on the South African side for a maximum of 12 years, and on the EU side for a maximum of 10 years from the date on which the agreements take effect. A phased elimination of duties is therefore designed in the agreements that will eventually lead to free movement of goods, services and capital between the EU and SA. The EU-SA FTA could therefore change the competitive advantage that the rest of the SADC members have and South African exports could even replace part of the other SADC members' current exports to the EU.

Akinkugbe (2000:21) finds that "the implementation of the EU-SA FTA is almost parallel with that of the Uruguay Round negotiations (WTO agreements) around the world, in the sense that the competitive conditions of the SADC members vis-à-vis Europe stand to be fundamentally altered in the next decade or so". As already mentioned significant structural changes due to macroeconomic imbalances are thus necessary in those SADC economies planning to diversify the composition of their export trade. Furthermore, SACU members, particularly Swaziland and Lesotho, may lose a sizeable proportion of their annual fiscal revenue on the full implementation of the EU-SA FTA, and these countries will have to find other ways of diversifying their internal revenue bases rather relying on trade taxes. These effects are also similar to the full establishment of the SADC FTA and it is therefore realistic to think with the establishment of the SADC FTA with South Africa as one of the members, that the EU-SA FTA and the EU-ACP agreements will be incorporated into further integration measures to simplify the process.

#### **5.4.1 Trade within Southern Africa**

Observing the trade behaviour of the SADC members identifies some interesting characteristics. The SADC has successfully increased intraregional trade over the past decade. The trade flows have increased more than tenfold since the formation of the SADCC. The SADC's performance has clearly outweighed that of other regional groupings within Africa, which reinforces the notion of the SADC being the most successful integration scheme in Africa (see also table 5.2). In 1997, the World Bank estimated intraregional SADC exports to be over 11% of total exports.



However, many of the SADC members' major trading partners are still outside the community and the African continent. A significant share of the region's trade is conducted with the developed world and the EU in particular.

**Table 5.2: Intraregional exports within the SSA region as a percentage of total exports**

GROUP/YEAR	1985	1990	1993	1994	1995	1996	1997
SADC	1,4	2,9	7,1	8	10,3	11,4	11,4
CEMAC	1,9	2,3	2	2,1	2,2	1,9	2
ECOWAS	5,2	7,8	9	8,5	9,1	8,7	9,7

Source: World Bank (1998, 1999)

Over the past two decades, for instance, almost 40% of all SADC exports were destined for Western Europe. There is also a strong correlation between trade patterns and their colonial ties. About 13% of all SADC exports over the past two decades went to their former colonial rulers. Also, as already pointed out earlier in the discussion, trade levels are low because of the composition of their exports. They often find themselves dependent on the export of one single commodity. For instance, exports from Angola are predominantly oil (86%) and for Botswana, diamonds (88%), while Malawi's exports mainly comprise tobacco (76%). It is also a well-known fact that high dependence percentages make economies more vulnerable to fluctuations in price and therefore market conditions.

**Table 5.3: South African trade within the SADC (excluding SACU), 1998-2001**

COUNTRY	% OF TOTAL SA EXPORTS		% OF TOTAL SA IMPORTS	
	1998	2001	1998	2001
Angola	6,9	7,2	0,5	0,1
DRC	6,4	3	0,8	0,6
Malawi	7,7	7,6	21,3	10,9
Mauritius	6,6	11,7	1,4	2,4
Mozambique	16,9	24,9	10	12,3
Seychelles	1,1	1,1	0,4	1,9
Tanzania	6,6	6,6	1,3	1,3
Zambia	13,5	21,1	9,9	7,7
Zimbabwe	34,4	23,3	54,5	64
SADC	11,1	11,8	11,1	11,2

Source: Department of Trade and Industry (2001)

Besides Western Europe, South Africa is the largest trading partner of other SADC members. Trade between South Africa and the rest of the SADC countries increased dramatically during

the period 1990 to 2001 (see table 5.3). Imports from the SADC increased from less than 1% of total imports in 1990 to more than 11% of total imports in 2001. The increase of South Africa's exports to the region was even greater – from 5% of total exports in 1990 to almost 12% of total exports in 2001. South African exports are concentrated in the value-added sectors such as minerals and base metals, chemicals, machinery, transport equipment and food and beverages.

The rapid increase in trade with SADC countries during the 1990s shows that South Africa enjoys a relative advantage in accessing these markets, mainly by virtue of its geographical proximity and South African businesspeoples' networks with their counterparts in the different SADC countries. The same, for instance, applies to Germany which enjoys a trade advantage in the EU towards neighbouring CEECs. Cross-border effects such as trade spillovers and cross-border shopping is therefore evident between South Africa and the other SADC members, rather than between the SADC members themselves.

South Africa experienced significant trade reforms and liberalisation because of its economic isolation prior to 1994. The import tariff rate (weighted average) declined significantly from 21% in 1994 to 15% in 1998. Textiles, electronic goods and automobiles are considered to be price elastic or sensitive and tariffs on these items will be phased out over the longer term. Trade liberalisation and change will continue in line with South Africa's commitment to the WTO (see NTSA 2001). Since 1999, South Africa has concluded non-reciprocal bilateral trade agreements with Malawi, Mozambique, Tanzania, Zambia and Zimbabwe which should increase trade even further between South Africa and these countries. Under the EU-SA FTA, South Africa has also agreed to remove barriers on 86% of EU imports, while the EU will scrap 95% of its tariffs on South African goods phased in over a 12-year period.

At this stage, the average tariff rate in the South Africa is about 10% and this compares well with federations such as Argentina (9,4%) and Brazil (13,8%). These rates are still uncompetitive compared with developed regions such as Japan and the US (3,3%) and Europe where the average between 3,3 and 3,6% (WEF 1999). South Africa has, however, established foreign trade relations but always attempts to improve on its trade performances by also improving small, micro and medium enterprises initiated though the Department of Trade and Industry's Ntsika project.

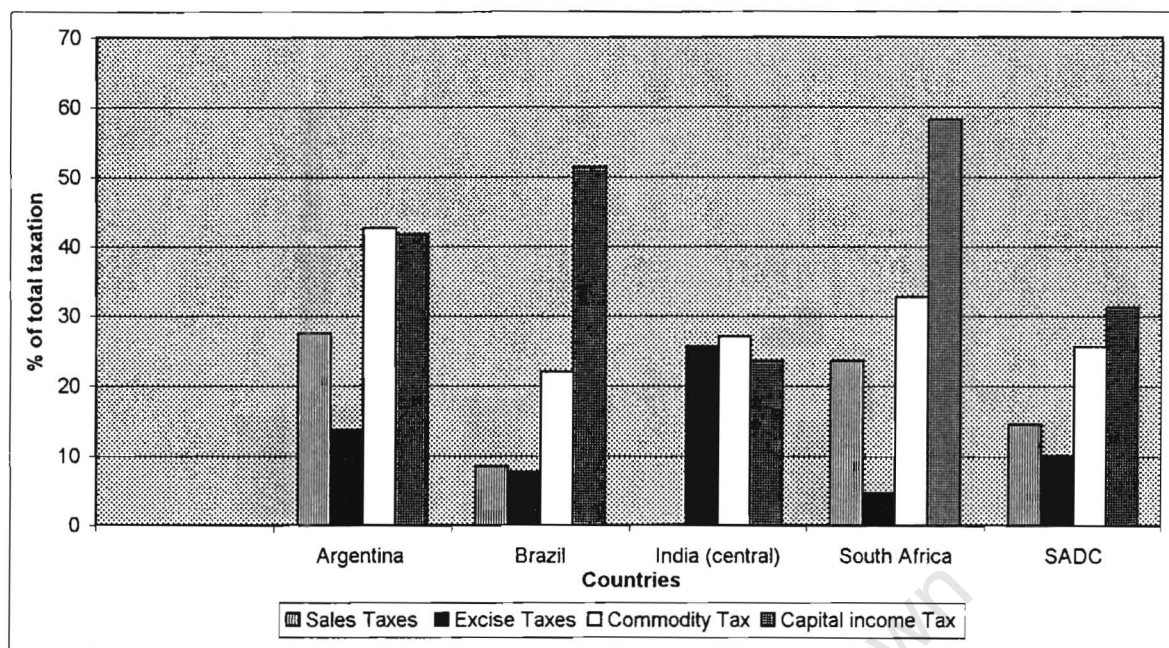
South African manufactured goods account for about 70% of exports to Africa, where these

goods have been successful because of competitive prices, shorter supply routes and a sound understanding of the African market. South Africa is, however, still largely reliant on the export of primary and intermediate commodities to developed countries despite attempts to diversify its export base. South Africa's principal exports are gold (40% of total exports), platinum, diamonds, coal, food, wine and manufactured products. Imports mainly comprise capital goods, raw materials, semimanufactured goods and consumer commodities, and originate primarily from Germany, Japan, the UK and the US. In February 1999, the main imports together with Switzerland and the BLNS countries, were machinery (30%), chemicals (11%) and minerals (8%). Germany, Japan, the UK and the US are also major export markets for South Africa.

From the above-mentioned discussion, it should become clear that fiscal adjustment may not be as significant in South Africa as in other SADC countries where customs and import duties are still important in comparison with other revenue sources. Also, the notion that the integration among African states may be sub-optimal to the integration between African states and higher-income regions (eg the EU). Furthermore, "regional trade agreements between Sub-Saharan African (SSA) countries could be of limited value and could even lead to trade diversion and a divergence of per capita income amongst member states" (Naude & Krugell 2001:502). This also means that for the SADC it would be more beneficial to integrate with the EU than with South Africa, and vice versa for South Africa. Further integration and fiscal adjustment measures should therefore rather be implemented as a cooperative mechanism between the members to ensure that tax revenues are equally distributed on some basis such as the population size.

#### **5.4.2 Commodity tax coordination and reform**

Figure 5.2 summarises the structure of the domestic tax systems of the federations and the SADC. For the SADC members there are still significant disparities. As already mentioned, Malawi, Mozambique, Zambia and Zimbabwe are countries that suffer the most from an FTA and/or customs union (Evans 2000).

**Figure 5.2: Commodity tax revenue, 1998/99**

Source: See Table B.5.

In general, tax systems are known to be non-neutral, that is, they cause distortions in terms of the allocation, especially in goods and factor markets in developing regions. Although estimates are unreliable, that is, the excess burden of taxation is significant in these countries various reforms have been introduced mainly to broadening the tax base with a simultaneous reduction in tax rates. In the SADC, members would either have to broaden the tax base or increase tax rates to compensate for losses incurred by the planned FTA and/or customs union. Some of these members have already started significant adjustments, especially in the field of commodity taxation, because capital income taxation does not allow much room to increase rates (see figs 5.2 and 6.1) or broaden the base. Marginal income tax rates are already high in comparison with international standards (see table 4.2) and increases in these rates are likely to distort employment, savings and investment even more, with a likely increase in tax evasion.

In terms of the tax base, the average share of capital income taxes already carries a significant weight (31,3%) and leaves some room for adjustment compared with the EU average (41,6%). The worldwide tendency has, however, been to rather keep the corporate tax burden as low as possible in order to attract more active or fixed capital and even to zero-rate some withholding taxes on foreign interest income (see table 4.2). The belief is that capital income taxes, specifically those on interest income, are “disappearing” because the implementation of the

residence principle on interest income has become ultra burdensome with cooperation between governments not always forthcoming. The SADC member governments also realise the need for the attraction of capital and this can be observed from the numerous tax incentives provided in terms of export processing zones (EPZ) and foreign investors (see sec 5.5). Accepting that the SADC governments have already decided on the relevant balances between capital income and commodity taxation, the most significant reform measures and fiscal adjustment could occur in terms of commodity taxation in the SADC. Capital income taxation, however, is not flawless and there is room for improvement. Measures of fiscal adjustment in this regard will be discussed in more detail in chapter 6.

The average share of sales taxes (14,6%) and excise taxes (10,1%) in the SADC are still relatively low (fig 5.2) compared with the EU average of 27,4% for VAT and 18,9% for excise duties (fig 4.2). In terms of the federations, Argentina's subnational authorities' tax revenue as a share of total revenue is about 90,8%, Brazil's 77,4% and India's 83,4% for 1998. Sales taxes (VAT) as a percentage of total taxation in Argentina are 27,5%, Brazil 8,5% and India only 0,1%. The same shares in terms of excise taxation are 13,8% in Argentina, 7,8% in Brazil and 25,7% in India. Although India's subnational share seems high, the central government still tends to undermine these authorities' rights and exercise too much control over these resources (see appendix E). The commodity tax shares of subnational levels are also much higher than those in mature federations such as Canada and the US (see fig 4.2).

Taxing powers have therefore been significantly devolved in Argentina, Brazil and India, and in some cases even to the detriment of the national governments as already mentioned. Although this trend of decentralisation is not observable within the SADC (only in South Africa), experiences from these countries can serve future prospects of SADC members as the region becomes more integrated towards a common market and possibly an economic union. The tax reform experiences of Latin American countries such as Argentina and Brazil, which have experienced significant tax reforms since 1980, can also provide important insights for future reform in the SADC. Latin American governments realised the importance of tax policy, and tax reform therefore became an integral part of wide-ranging economic reforms in the region.

Latin American governments found that tax policy was an instrument that was relatively easier to wield than politically difficult expenditure cuts, and its effects were more immediate, and in the short and medium term at least, it was more directly measurable than those of other economic

policies. As Latin American economies became more integrated with the rest of the world, tax systems could no longer be viewed in isolation. The growth of emerging financial markets and the surge in direct investment and more open trade and payments regimes gave impetus to the reform movement. Tax competition became a prominent issue and governments realised that they had to reduce or eliminate taxes that raised business costs and domestic firms in positions where higher rates applied at a disadvantage in world markets.

At the beginning of the 1980s, most Latin American tax systems were complex and cumbersome, loaded with hundreds of revenue agencies with little revenue being collected. Consumption and production suffered because of multiple rates and were weakly administered (Shome 1995). These taxes were also insufficient because of “cascading”, which taxed not only the value of production but also taxes paid at earlier stages of production since they were generally levied at the manufacturing stage (such as those now present among some of the SADC members), rather than the retail stage, they hampered competition and added to production costs.

Tax reform in Latin America has been implemented in various ways. In Argentina, for instance, tax reform led to a radical redesign of the entire system, whereas in Columbia, it was carried out as a series of steps over a number of years. Reform-induced countries simplified their tax systems focusing on income taxation in the early years of the reform process and, increasingly, the taxation of production and consumption in later years. As the economies of the region matured and were integrated with the rest of the world, attention was also focused on the fine-tuning of particular aspects of the tax system with international ramifications such as the exchange of information, foreign tax credits and transfer pricing. The latter issue will be discussed in greater detail in chapter 6.

In terms of commodity taxation, VAT was an important part of the reform effort between the early 1980s and 1994, and the number of countries with a VAT doubled from 10 to 20. In the early 1980s, some countries either had a rudimentary VAT up to the manufacturing-importing stage, or a production-type (origin-based) VAT which disallowed credit for capital goods purchases. In the second half of the decade, these countries began to reform their VATs, by reducing the number of rates (Bolivia, Chile, Columbia and Mexico) and expanding the base by reducing exemptions and raising coverage, particularly of services (Argentina, Bolivia, Chile, Colombia and Mexico). Furthermore, some countries, notably Argentina, Chile, Colombia and Mexico converted to consumption-type (destination-based) VAT and improved their tax

administrations.

Countries that achieved a large increase in their tax-to-GDP ratios, such as Argentina, Bolivia and Colombia often did so through VAT. As VAT revenue rose, countries relied less on excises, taxing only a few items such as beverages, tobacco, petroleum products and automobiles instead of a broad range of goods and services. All of the major countries in Latin America have also done away with export duties and most have reformed import tariffs with the dispersion of these rates being reduced and tariff levels significantly decreased. The Latin American experience is far from perfect, especially with regard to subnational commodity taxation as in Brazil. Fiscal or tax adjustments should therefore always directly be handled in line with economic circumstances in a particular country. As mentioned earlier, some SADC members have already started fiscal adjustments for the planned SADC FTA and/or CU, specifically in terms of commodity taxation (see table 5.4).

#### **5.4.2.1 Fiscal adjustment and tax reform**

Namibia has experienced a significant adjustment with a switch from a GST of 8% in 1997 to a standard VAT of 15% with an increased rate of 30% in 2000 (columns 2 and 3 in table 5.4). This rate would leave ample room to compensate for any losses in terms of customs revenues. Tanzania also has a VAT system with a rate that changed from 10 to 20% from 1997 to 2000, with the DRC close on its heels with a standard VAT rate of 18%. Although these countries did not incur significant problems in compensating for any revenue losses of tariff reform, the rate is not as important as the quality of the reform involved. Keen and Lighthart (1999:18) point out that, if an underlying tariff reform improves production efficiency, replacing the tariffs with domestic consumptions taxes (specifically emphasising VAT) will raise welfare in a small open economy. This should therefore also be applicable to those countries in which significant tariff reforms are necessary.

Countries such as Malawi, Mozambique, Zambia and Zimbabwe would lose the most in terms of the planned FTA and/or customs union and therefore require close scrutiny. Malawi has a sales tax of 20% at manufacturing level. Sales taxes in the SADC region are usually levied at manufacturing level which is also similar to the so-called "whole sales tax" (WST). CREFSA (1998) estimates this rate would have to increase by 5,2 percentage points to offset revenue losses. Mozambique has a standard VAT of 17% which was introduced in 1999 and as such is

already on the road to change. Zambia has a standard VAT of 17% introduced in 1995 (table 5.5). According to CREFSA (1998), this rate would have to increase by 3 percentage points to offset losses. The sales tax rate in Zimbabwe would have to change by 7,6 percentage points to 22,6% if the present standard rate of 15% on goods and services other than basic goods (0%), electricity (5%) and luxury goods and motor vehicles (25%) is taken into account.

**Table 5.4: Commodity tax rates and excise categories, 1999/00**

COUNTRY	SALES TAX RATES (%)	VAT-RATES (SADC FTA/CU)	EXCISE CATEGORIES
Argentina <sup>1</sup>	1 – 3,5 (RST)	---	Wide variety (other than exports) at varying rates.
Brazil <sup>1</sup>	7 & 25 (ICMS)	---	Federal excise tax (IPI) which is similar to a VAT.
India <sup>1</sup>	4 (CST)	---	Levied on certain types of manufactured goods.
Angola	10 & 30 (sales tax at manufacturing level)	N/A	Other taxes include taxes on oil production, an oil transaction tax and a surface tax.
Botswana	0 & 10 (sales tax at manufacturing and import level) <sup>2</sup>	11,2	Tobacco (15%), alcohol, fuel, soft drinks and certain luxury goods with specific rates on fuel and alcohol.
DRC	18 <sup>2</sup>	N/A	Luxury goods, alcohol and tobacco (at 24%).
Lesotho	5, 10 & 25 (sales tax at retail level) <sup>2</sup>	11,4	Alcohol, fuel, soft drinks, matches and certain luxury goods. Other taxes include sand and stone levies and a petrol levy.
Malawi	20 (sales tax at manufacturing level)	25,2	Tobacco and alcohol.
Mauritius	0 & 10 <sup>2</sup>	12,8	Tobacco, alcohol and materials (textiles).
Mozambique	17 <sup>2</sup>	N/A	Tobacco, alcohol, perfume, cosmetics and toiletries (at 20-75%).
Namibia	15 & 30 <sup>2</sup>	8,4	Tobacco, alcohol, fuel, soft drinks and certain luxury goods. Other taxes include a sales duty (0-25%).
Seychelles	Trades tax under the Trades Act 1992 on all imports and locally manufactured goods and services.	N/A	---
South Africa	14 <sup>2</sup>	14,03	Tobacco, alcohol, fuel, soft drinks and certain luxury goods. Other taxes include a fuel levy.
Swaziland	14 & 25 (sales tax) <sup>2</sup>	13,3	Imported local goods such as tobacco, alcohol and petroleum products. Other taxes include a sugar cane levy, sugar export levy, entertainment tax, sports levy and fuel tax.
Tanzania	20 <sup>2</sup>	11,2	Other taxes include a dairy industry levy, entertainment tax and motor vehicle registration tax.
Zambia	0 & 17,5 <sup>2</sup>	20,5	Tobacco, alcohol, fuel and entertainment tax.
Zimbabwe	0, 5, 15 & 25	22,6	Tobacco, alcohol, fuel, soft drinks, petroleum products. Other taxes include a tobacco levy and automated financial transactions.

Notes: 1. In Argentina, a VAT of 21% is applicable at federal level. Each of the 24 provinces imposes a quasi-RST (taxation on the gross revenue for the sale of goods and services) where most industries and exports are exempt from this tax. In India, the central government levies a sales tax of 10% (the Union excises) which the states levy. Besides the latter, a special tax, namely the central sales tax (CST) of 4%, is levied by exporting states on interstate exports (origin-basis) in all the states and the revenues also accrue to the states. Brazil has a subnational VAT (7-25%) levied on an origin-basis (further details are provided in sec 5.4.3).

2. All these countries have a VAT system except Swaziland which is planning to switch over to VAT in July 2001, Botswana in July 2002, and Lesotho and Zimbabwe also during 2002.

3. The BLNS countries and South Africa as SACU members maintain essentially the same tax base in terms of customs and excise duties (Customs and Excise Act with Amendments 1964; NTSA 2001).

Source: CREFSA (1998); FISCO (1999); NTSA (2001); IMF (2000); SADC (2001)

Malawi and Zimbabwe (2002) have also committed themselves to switching to a VAT system. Mauritius which has been relatively dependent on trade taxes, switched over to a VAT of 10% in



1998 bringing it more in line with the rest of the SADC members. This switch could also enhance Mauritius's overall tax effort (16% of GDP in 1998) in future. The VAT rate would, however, have to increase by a further 2,8 percentage points to compensate for any revenue losses (CREFSA 1998). Besides rate increases, the mere fact of switching to VAT in the SADC can already improve the buoyancy of these revenue sources and decrease the distortions associated with commodity taxation.

Any sales tax that does not extend through the retail sales level can cause administrative problems because if the actual sales price is used, competitive distortions are created in different channels of distribution. For instance, when manufacturers or wholesalers sell directly to ultimate consumers at retail prices, the price should presumably be reduced to the wholesale level. However, if manufacturers sell directly to retailers who assume some manufacturing or wholesaling functions, the actual sales price should be increased to equalise the situation of such sales with those made through regular channels of distribution. This type of tax has therefore proven to be ineffective as a revenue-raising instrument in several countries such as Australia (see Messere 1993), and countries such as Angola should also consider changing over to a VAT system. South Africa's experience probably served as a directive to those SADC countries that switched over to VAT during the 1990s.

The South African experience, like the experience of Latin American countries, can also provide useful lessons to the rest of the SADC members that are planning to switch over to a VAT system. The collection of commodity taxes through a comprehensive VAT (including retailers) has become standard practice worldwide. It has also become the focus of tax reform efforts in developing regions. In South Africa, the Margo Commission (1987:345) recommended as an alternative to reducing the GST rate and introducing a comprehensive business tax (CBT) or a value-added income tax (VAIT) as discussed in chapter 4, that GST should be abolished and replaced with a VAT credit or invoice-based system. Consequently, VAT was introduced on 30 September 1991.

#### **5.4.2.2 Base broadening and tax compliance**

In accordance with the OECD practice worldwide which is a reasonable indicator of "international best practice" (see sec 2.4), VAT should be on a broad basis (including goods and services) and a credit (invoice) system, and the destination principle should hold. Thus far, the

administrative ideal of only a few rates has been achieved in South Africa with only one standard rate and a zero rate. The rate has also been relatively low and increased from 10 to 14%, which is still within the recommendation of the World Bank (1991) of between 10 and 20% for developing countries. In 1996, the VAT base was broadened to include most fee-based financial services. However, the VAT system tends to be more regressive with a few exemptions and zero-ratings still in place. The Katz Commission (1994:133) recommended against the further erosion of the VAT base through zero-rating or exemptions stating that targeted poverty relief and development programmes should rather receive priority instead. This currently is being done in South Africa through the Department of Public Works' community-based projects. In addition, higher VAT rates on luxury goods or a multiple VAT rate system should be avoided. The main reason for the latter recommendation was that such a system would not reduce regressivity, would have high administration and compliance costs and would not have much additional revenue potential.

In a VAT credit system, multiple rates, as in the case of zero-rating (say, on exports) and exemptions, open up opportunities for fake claims and hence tax evasion, but also complicate administration for tax authorities and taxpayers alike. In the end, an optimal system of commodity taxation (see sec 2.4) can be secured only if the loss of economic efficiency with VAT is minimised through uniform rates or a few rates applied to the broadest possible base. If this does not happen, a compromise will have to be made between administrative costs and equity. This case is even further strengthened if a system of income and expenditure supports is already in place for the poor.

A broad-base VAT also means that the necessary increase in tax rates is smaller than for specific commodity taxes such as excise taxes and that the risk of distorting specific markets is correspondingly lower. The SADC region can gain from South Africa's experience of excise duties. The World Bank (1991:6) recommends setting three or four selective tax rates on luxuries and nonessentials, with the rate ascending according to the item's role in the consumption of the rich. The Katz Commission (1994:133) recommends that the present ad valorem excise duties in South Africa be retained but that the possibility of introducing a progressive ad valorem duty on luxury motor vehicles should be investigated. Since 1994, excise taxes on tobacco products (for health reasons) have progressively been increased to 50% of the retail price. The BLNS countries already have a common customs (which has been phased down in line with WTO regulations) and excise system applicable under South African legislation for

SACU, and it will become necessary for a future SADC FTA (CU) to specifically coordinate excise duties for further integration purposes. The South African government has also initiated a rewrite of the Customs and Excise Act of 1964, primarily because its readmission to the international arena has shifted the focus from revenue collection to trade facilitation and control (NTSA 2000:73).

At present the excise categories in the SADC largely correspond and include mainly tobacco, alcohol, fuel, soft drinks and certain luxury goods (table 5.4). The rates, however, still seem to differ considerably. In this regard, the EU experience can serve as an example with common customs and tariffs, and common excise duties which have been set through minimum rates. The SADC countries should, however, be careful not to imitate developed regions' experience in every detail because as already mentioned, the needs of developing countries' may differ significantly from those of developed countries.

Another more recent experience of the Zambian government could better serve the SADC region. The government undertook a comprehensive review of both the tax system and customs duties, with the intention of significantly broadening the base of taxation. A considerable number of exemptions in both taxes and customs duties were eliminated and the emphasis shifted from specific consumption taxes such as excise duties to sales taxes in the form of VAT introduced during 1995. The Zambian authorities achieved higher revenues (tax revenue reached 31,5% of the GDP in 1999), despite significant cuts in customs duties and marginal tax rates. The ultimate objective is that other SADC governments would learn from, say, the South African and Zambian experience. It is, however, questionable whether the different SADC governments cooperate with their neighbours or whether they have established links with one another<sup>90</sup>.

The Zambian experience reminds one of Argentina's experience with tax reform at the beginning 1990s. The government implemented radical changes in response to successive crises, and the lack of political resolve to enforce tax laws progressively eroded the tax structure and administration. Revenue only reached 11% of the GDP in 1989, compared with 14% in 1985. The strategy was thus to improve the quality and quantity of revenue mobilisation by eliminating taxes that were easy to collect but inhibited growth such as export taxes and taxes on financial

<sup>90</sup> In the event of directing various requests for information from the different SADC members (4 April 2001), it was interesting to find that these countries do not have information about one another's tax systems and tax rates which indicates a lack of either cooperation or communication.

transactions, and to concentrate instead on a few major taxes such as VAT and on overhauling the tax administration. The strategy was highly successful, and the ratio of tax revenue to GDP climbed to 16% in 1993.

Argentina's VAT went from being the least revenue-productive<sup>91</sup> in the world to being highly productive (Shome, 1995). The tax base was broadened and evasion sharply cut. Businesses failing to make timely or correct declarations were summarily closed for three days. In 1990, 700 taxpayers were penalised in this way. In 1992, the number rose to 12 000. This had a strong impact on VAT compliance. New invoicing requirements and controls were introduced, and expanded information on VAT taxpayers helped improve the collection of other taxes by permitting tax inspectors to cross-reference tax data. Since the second half of 1992, the government has focused increasingly on using the tax system to improve enterprise competitiveness. Foreign trade taxes have been lowered and in an effort to improve the cost structure of the economy as a whole, the federal government has also started encouraging provincial governments to reduce or eliminate local taxes that impinge directly on enterprise costs. Although the Argentine VAT system is not flawless (see sec 5.4.2.2), it can teach the SADC an important lesson on the topics of base broadening and tax evasion.

Although it would appear unnecessary with a tax revenue effort already in full swing (fig 4.3), a broadening of the tax base in the SADC could minimise upward pressure on tax rates, and thus improve the international competitiveness of the region and avoid excessive tax-induced distortions. It could also improve the revenue productivity of commodity taxes (GST and VAT) which is still relatively low measured in terms of OECD standards (CREFSA 1998). Various countries also still maintain tax incentives concerning sales taxes on exports or export-processing zones (EPZs). For instance, in Angola, Malawi, Mauritius, Mozambique, South Africa, Zambia, and Zimbabwe all kinds of incentives (VAT exemptions, and customs and excise duty exemptions) on materials and inputs used for exporting purposes or within an export-processing zone (EPZ), are still included in the GST/VAT system. Although these incentives apply to outward-oriented operations, they can reduce the effective VAT rate and work against the objective of a broader and ultimately a coordinated base for the region as a whole. SADC governments have, however, increasingly started with concerted efforts in tax compliance, notably Mozambique where an independent UK-based private agency has been appointed to operate customs revenue, and in South Africa, where the South African Revenue Service

(SARS), an autonomous agency within the public service, has been established. In both cases the result has been a significant increase in revenues collected.

Tanzania and Zambia have also established independent revenue authorities and it seems as if this type of reform appears to be gaining ground in the region with positive effects for revenue productivity. Zimbabwe had the same kind of spot calls in 1997 as those in Argentina in 1992. Under separate operations, the Department of Taxes and the Department of Customs and Excises in Zimbabwe checked businesses for tax payments and gained substantial sums of money outstanding. In South Africa, the SARS record speaks for itself. By the end of March 2001, SARS had continued its 6-year track record of surpassing tax collection targets (National Treasury of South Africa 2001). To date, SARS has collected R219,7 billion, that is R7,5 billion more than the printed revenue target of R212,2 billion and more than the revised target of R215,5 billion. Most of the additional revenue was derived from income tax and consequently the deficit before borrowing was therefore adjusted from an estimated 2,4 to 1,9% of the GDP, something that many European countries have been unable to achieve. A lower net borrowing requirement with lower debt service costs is therefore also expected. It would thus appear that tax evasion has been considerably reduced although it is interesting to note that the South African auditor-general has not yet at that stage given its signed approval to SARS statistics.

Although from experience, the most attractive instrument of commodity taxation for fiscal adjustment is a broad-based GST in terms of simpler administration and compliance, SADC members generally seem to be switching over to a destination-based VAT credit system. The administrative capacity of these countries seems to have and there could be a greater reliance on VAT in the future. For instance, Swaziland has decided to introduce a VAT of 14% effective from 1 July 2001. This VAT will essentially be destination-based with the tax at multiple stages, that is, on the first sale of imports into Swaziland; on the first sale of manufactured goods in Swaziland; and on taxable services rendered in Swaziland. Botswana is also planning to introduce a destination-based VAT of 10% in 2002 which will make its current sales tax base much wider but with fewer exemptions and zero-rated exports<sup>92</sup>. The VAT system is usually known for its broad basis with value being added in each production stage (multiple stages). Higher rates are therefore more tolerable in terms of VAT rather than a US-type GST or RST

91 Revenue productivity of commodity taxes such as VAT/GST can be measured as follows: VAT/GST as % of GDP : VAT/GST tax rate.

92 In a telephonic discussion (3 April 2001) with the assistant commissioner (collection), Mrs M Zwane, it was confirmed that the Lesotho government has in principle accepted the introduction of a VAT system but that the specifics of the tax were not yet in place. In further electronic discussions (5 April 2001) with Mr GT Pasi, the Commissioner of Taxes from Zimbabwe, it was confirmed that Zimbabwe is also

levied at one stage (see ch 4). The VAT system normally entails more administrative costs and it is therefore important that the introduction of such a system involves careful planning and that governments already have the administrative capacity in place to maintain the system. An effective VAT system, if correctly implemented, can therefore eliminate any discrepancies that might exist in terms of bookkeeping for tax purposes and also tax evasion as such (see secs 2.3 and 4.3).

Shalizi and Squire (1988:7) emphasise that if an “embryonic” or all-inclusive commodity tax is in place, the role of this taxation as a source of revenue should be expanded. In the short run, this could be achieved by means of an increase in the tax rate with a compensating reduction in tariff rates (as already pointed out in the case of the SADC). In the long run, expansion in the base will allow further reductions in rates and cause an increasing amount of revenue to be generated from the taxation of domestic activities. Further measures of fiscal adjustment in the SADC to reach the objective of regional growth may therefore include a broadening of the commodity tax base past the manufacturing/wholesales level as already discussed, and the broadening of capital income tax bases with enhanced compliance and disciplined spending.

#### **5.4.3 Future prospects**

It is clear from the investigation thus far that the SADC governments will have to make some adjustments in terms of commodity taxation and that there is always room for improvement. In this Section, future prospects in terms of the present system of commodity taxation that exist in the region will be explored. The possibility of the adoption of a VAT system for the whole of the region in particular will be analysed, especially with a view to further integration efforts such as a CM. Under the present system, it would appear that most of the SADC governments will apply a destination-based VAT in the future, and that the intention in the short run could be to skip the FTA and immediately move to a CU where origin is irrelevant.

##### **5.4.3.1 Revenue sharing, revenue clearance and the destination principle**

As pointed out earlier, the SADC might proceed with a CU because of the difficulty of compliance with origin rules in the planned FTA and/or CU. In a CU, countries are normally concerned with avoiding fiscal discrimination (ie ensuring tax neutrality) which causes

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planning to switch over to a destination-based VAT but that the base and rate had not yet been finalised.

differences in competitiveness, and the importance of fiscal autonomy or sovereignty is recognised. Customs duties are collected at the point of entry, irrespective of the final destination of the goods within the CU. All of the parties to the CU may therefore collect duties on imports destined for other parties. Unless the customs revenues from such cross-border or trans-jurisdictional imports are more or less equal, some mechanism or formula for revenue allocation must be devised if one of the parties is not to end up subsidising the other. For instance, in terms of SACU, BNLS imports from the rest of the world reach South African harbours first and South African imports alone are also much more than those of the BNLS countries. A CU therefore abolishes economic but not fiscal borders, and fiscal equalisation measures (eg the common revenue pool of SACU) are needed to eliminate distortions due to taxation.

In terms of the future SADC FTA/CU, countries such as South Africa may not be willing to provide compensatory mechanisms such as those applicable within SACU. There is uncertainty exists about South Africa's ability or willingness to continue its compensation programme to current or any future members of an enlarged SACU (SADC) as well as the willingness of the other members to stay in SACU in the absence of such payments. As SACU continues to liberalise, the new revenue-sharing formula will become impractical but will also have a negative impact on smaller economies that have done little to diversify their revenue source. A similar problem arises in respect of other indirect taxes, especially the VAT, if the destination principle is to be upheld. It is often argued that this principle is rarely supported in full by tax-incidence analysis, and that if one considers the implications of the term "VAT" - a tax on value added in production - then its revenues should fall to the tax jurisdiction in which production (origin) takes place, rather than the one in which the final products are consumed (destination). The application of the destination principle, however, ensures that foreign sales (exports) are tax-exempt and all domestically paid taxes are reimbursed. Taxation therefore takes place in the importing country, including taxes on the last exchange with compensation corresponding to the various taxes that a similar product of the importing country would have paid in the preceding phases.

Normally special provisions such as border tax adjustments still have to be made to enable the exporter to be rebated for VAT previously paid in the importing country. The importer can then reclaim VAT after retail sale in the importing country (see sec 4.3.1). The destination-based VAT therefore guarantees a greater degree of neutrality and uniformity. For a future SADC

CU/CM, revenue sharing or rebate schemes can be constructed on some general formula or on that of actual revenue clearance. Whereas the former has the advantage of administrative simplicity, it also raises questions of the formula's derivation and its adjustment over time. In the case of VAT, for instance, the general formula normally fails to take into account the composition of trade. For instance, it could be that VAT-exempt items constitute a larger share of Zimbabwe's exports to South Africa than of imports from South Africa. The formula would therefore overestimate the VAT revenue on South Africa's purchases accruing to Zimbabwe, thus underestimating the sum to be rebated to it from South Africa. More detailed formulas, on the other hand, would require frequent updating and renegotiation.

A bookkeeping approach or national accounts of revenue clearance on the basis of actual payments would make more sense for a future SADC. This will, however, require identification of the ultimate destination and that such information be readily available from a computerised customs-clearance system operated by the South African customs authorities which are now also responsible for customs and excises of SACU. In terms of VAT, a credit system with invoices issued by the sellers (registered traders) to the importers will prevent double taxation. The importer normally uses this invoice to claim a rebate from his/her tax authorities for VAT already paid on inputs purchased from the exporting country and thus retrieving the money from the exporter's exchequer or revenue authorities.

In the absence of economic borders, say in a future SADC CM, the difficulty of levying VAT on a destination basis (same as interest income on a residence basis) effectively means that the origin principle is practised. The origin principle is, however, distortive in terms of production. The destination principle (with a revenue-clearance system) will therefore make more sense in a developing context, specifically because production (export-oriented growth) and FDIs are first in line as employment generators. Furthermore, in a future SADC, competition could become exceptionally severe when tariffs have been eliminated among member countries in terms of a CM. Here, each country could promise a wider market to foreign capital than before and consensus would have to be reached in terms of tax diversity (competition) or uniformity. The same argument applies once revenue losses in terms of the SADC FTA have been recouped through, say, higher VAT rates, and countries such as Malawi, Zambia and Zimbabwe will have to re-evaluate their different situations to prevent tax competition from driving them out of the market. The experiences of other developing countries can also provide useful lessons in this context.



In countries such as India and Argentina, commodity tax reforms have proceeded more slowly (only started in 1992) than those in Brazil, perhaps because of fear of the same difficulties. India's sales tax system is still problematic because of its nonharmonised nature with various types of sales taxes at central and state level, including a CST levied on an origin basis at state level (table 5.5). Most of the Asian economies carry a sales tax or VAT-rate of 10% and as such the World Economic Forum (1999) classifies sales tax or VAT rates in Asian economies as a competitive asset whereas Latin America's sales tax or VAT systems is seen as a liability. Argentina, however, provides the best-case scenario in this analysis because it has already started to switch over to a destination-based subnational VAT system (table 5.5).

Brazil's problematic VAT-system (see also sec 3.5) specifically, can therefore provide some interesting insights for the future decentralisation exercises of individual SADC members or for further integration of the SADC members (subnational level) into a common market or an economic union. Brazil was the first country to introduce a fully-fledged VAT in 1967. The introduction of VAT in Brazil and the consequent problems are directly related to the fact that it was also introduced as a subnational VAT (see sec 3.5). The rate structure also changed from a single to a multiple rate system and the new tax resulted in a series of complex technical and administrative problems of how to apply different VATs in the different states (the ICMS for each state) in addition to a federal VAT (the IPI)<sup>93</sup>. At present, the origin principle applies to interstate trade in Brazil. There is no meaningful concept of administrative integration between the federal and state versions of the VAT. Brazil therefore has the problems of dealing with cross-border trade which has been problematic even in the EU (sec 4.3), but also excessive compliance and administrative costs, location distortion, and tax exporting and competition (Bird 1999). Despite uniform rates for the states on exports (see sec 3.5) and attempts to alleviate the distortionary effect of the origin principle by imposing a standard rate of 12% on interstate trade (with an exception of a lower rate of 7% on shipments to the poorer state), there are still economic complications.

Recent recommendations in Brazil made provision for the adoption of an integrated VAT system with a new federal ICMS that would be collected together with a revised state ICMS on the same

93 Nowadays, Brazil levies a VAT payable on sales and transfers of goods (industry) in the form of a federal excise tax or then VAT (IPI or *Imposto Sobre Produtos Industrializados*) at various rates in accordance with the nature of the product (10 to 15 % and in certain cases over 300 %). A state sales and services tax or VAT on agriculture, industry and other services (ICMS or *Imposto Sobre Operacoes Relativas a Circulacao de Mercadorias e Servicos*) of 7 to 25% is also levied. In addition, a municipal services tax, the ISS (*Imposto Sobre Servicos*) is levied on gross income by municipalities on a variety of industrial, commercial, and professional services levied on gross income by municipalities on a variety of industrial, commercial and professional services.

base as a unified VAT at a uniform national rate consisting of a federal rate and a uniform state rate similar to the “harmonised” VAT system in Canada or the proposed “common” VAT system (1996) in the European Commission (see Secs 3.5 and 4.3). After considerable debate, the state ICMS was substantially revised to eliminate significant elements of taxation on exports and investment in the existing system, with the federal government guaranteeing that no state would lose revenue as a result of the change. Bird (1999:25) argues that in general, in Brazil as in Argentina and India, a decent VAT system with subnational governments also applying independent VATs will require the implementation of the destination principle at different tax rates on interstate trade and some means of compensating “losing” states for revenue losses implied by the transition. This type of system resembles the one in Canada which is also similar to the CVAT option and also the tax-sharing option (specifically the so-called *gewerbesteuer* or local business tax) in Germany.

As already mentioned in section 4.3, a good administrative system assisted by mutual trust and a high degree of negotiation between the different levels of government is necessary when the destination principle is applied. The theoretical case for the destination (residence principle) is strong (sec 2.3) but not absolute. As stated repeatedly in this study, the ease with which some commodities or capital goods can be moved means that a significant element of origin (source) taxation is always inescapable. However, consensus seems to exist in favour of maintaining as much of the destination principle as possible (maybe supporting it by use of restrictions on distance sales); also because of a fear of transfer pricing problems that potentially arise when VAT is levied by the origin principle<sup>94</sup>.

Although SADC governments’ administrative capacities seem to have improved since the 1980s (Shalizi & Squire 1988), a high degree of mutual trust such as the one present in the “harmonised” VAT system of Canada or tax-sharing options of Germany, could still elude these governments<sup>95</sup>. The growing problem of direct sales through electronic commerce (see sec 4.3) might still also become a problem in the SADC. The Green Paper on E-Commerce (RSA 2000b:30) in South Africa also recognises this problem and questions to what extent e-consumption should be taxed. A consideration of alternative approaches (the CVAT and VIVAT

94 Levying VAT on an origin basis effectively means charging the value that is added to a product in different jurisdictions at the rates charged by those jurisdictions. Multinational firms or firms operating in multiple jurisdictions then have an incentive to transfer price value-added into low-tax jurisdictions, say, charging high internal prices for intrafirm sales out of them (see sec 3.5 for a discussion of the Brazilian experience).

95 In an electronic questionnaire to some of the SADC governments (dated 2 April 2001), one of the requests was whether they had any information about their neighbouring countries’ tax systems. The answer was conclusively negative.

systems) to the destination-based VAT system has therefore become necessary<sup>96</sup>.

When considering alternative approaches, the importance of an overarching authority again becomes clear. Keen (2000) argues that in the absence of an overarching authority, both the CVAT and VIVAT systems schemes run into difficulty in securing appropriate clearing, ensuring that revenue collected on exports from one jurisdiction is available to finance credits/refunds claimed in another. This problem could be resolved by providing incentives to subnational tax administrations to provide the appropriate level of effort in terms of their wider collective interests. Of course, as mentioned in chapter 4, also in terms of the EU where tax sovereignty is regarded as more important, is naturally the adoption of an overarching federal or supra-national authority.

In the SADC the harmonisation or coordination of commodity taxation could become necessary in the long term. In the short term it is important to concentrate on revenue losses and therefore rate increases for some countries, notably Zambia and Zimbabwe. Cross-border trading has also shown significant growth with South African cross-border debtor finance worth approximately \$20 million in April 2001<sup>97</sup>. With enhanced cross-border trade the possibility of factor movements increases and the concept of tax competition in terms of customs and excise duties, sales taxes and VAT becomes relevant. In this regard, South African authorities would have to take the future effect of the enhanced taxing powers for South African provinces into account in terms of the whole SADC region. Intergovernmental relations will have to be coordinated in accordance with a strategy for the whole of the SADC.

The adoption of the destination principle is therefore advisable for a future SADC, although not always administratively feasible, and could secure most of the neutrality needed in a region that is in a process of trade liberalisation. With deeper integration and in the absence of border controls, a national accounts clearance mechanism (see sec 4.3) operated by SARS or an agreed upon independent revenue authority, could be the sensible route to follow. Even if the destination principle prevails in the SADC, governments must consider the adoption of permissible tax rate “bands” for VATs although the benefits of complete harmonisation are unlikely to exceed the costs (CREFSA 1998; see also sec 2.4). A degree of flexibility could

<sup>96</sup> See Bird (1999); and Keen (2000) for an extensive discussion of alternative approaches to the destination-based VAT system such as the CVAT proposal for India and Brazil where an over-arching federal government exists and the viable integrated VAT or VIVAT proposal for the EU where no such authority exists.

<sup>99</sup> International cross-border debtor finance was worth \$500 billion in 2000 (Business Day 2001).

drive a “healthy”, export-oriented competitive process with automatic harmonisation.

Faria (1995:24) summarises the experience of the EU with VAT as follows: “Within the EU, it has proved easier, in relation to VAT, to agree on the nature of the tax (consumption or destination type), and the base (virtually all domestic consumption goods and services except investment goods or financial services) than the tax rate structure (number and levels of rates, although the 6<sup>th</sup> Directive has formalised a minimum rate level of 15 %). Tax sovereignty (normally secured by the origin principle) will probably also be high on the agenda of SADC countries. Although a spontaneous harmonisation is possible with the adoption of proper convergence criteria as in the case of the EU, an overarching (independent) fiscal authority (and maybe a clearing mechanism in the absence of border controls) may be necessary for administrative ease and the perfection of VAT operation. This can only be achieved through a high degree of close cooperation and negotiation on the SADC governments’ part, especially through Ministers of Finance. In short, developing countries such as those in the SADC have to choose a tax system that promotes growth and development.

Another factor that should never be overlooked in the choice of the most appropriate system of taxation in a future SADC is that a balance should be maintained between commodity and capital income taxation. It could happen that one country is in favour of high commodity taxation but not capital income taxation. The opposite could be true of another country within a future SADC, with the argument that low commodity taxation compensates for high capital income taxation. In the first case, the country with the high commodity taxation would favour the destination principle (with border tax adjustments). In the second, the country with the low commodity taxation would favour the origin principle because exports already carry a high capital income (corporate) tax burden. The next chapter will focus on capital income taxation (including distributed and undistributed profits) in the SADC in comparison with other experiences in the field. The objective will therefore be to reconcile this chapter with the next and seek a viable strategy in terms of taxation and macroeconomic stability.

## 5.5 CONCLUSION

Most SADC members have centralised or unitary systems with some characterised by authoritarian rule and/or high military expenditures especially in war-torn countries such as

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Angola and the DRC. Several heads of state such as those of Namibia and Uganda, with the most recent case in Zambia, have also opted to adjust their constitutions in order to lengthen their terms of office. Data are therefore not always available or nonexistent for subnational levels. In a number of countries, decentralisation has not yet resulted in a relinquished control from the centre (eg in Tanzania) and is partly related to the quality of governance at different levels. Besides Uganda, South Africa is regarded as one of the few African countries that is in a process of unification through decentralisation. The role of a democratic South Africa in terms of further regional integration (and thus the process of fiscal decentralisation) in Southern Africa therefore has to be confirmed.

In terms of fiscal policy it is obvious that a significant and sustained tightening is required and that in most SADC countries, the fiscal position is incompatible with either unilateral or regional trade liberalisation. Most SADC members will therefore have to take action to restore internal balance, although countries such as Botswana, Lesotho, Mauritius, Namibia, Swaziland and Seychelles are already showing signs that further trade liberalisation will be to their advantage. Although countries such as Malawi, Mozambique, Zambia and Zimbabwe could lose in terms of revenue, broadened tax bases, improved tax compliance and rate increases of especially commodity taxes in particular could significantly alleviate the problem. In addition, the need for convergence criteria in a future SADC region should be recognised, whilst creating incentives for members to reach targets and in so doing improve their economic performances. The importance of strong leadership should also be recognised, and in this regard it is advisable for the SADC to utilise South Africa's experience and resources to its advantage instead.

The South African economy is, an exception especially because of its relative size in the SADC. However, this should be regarded as an advantage in the region. The South African economy already makes significant contributions in terms of exports and imports in the region. It can therefore be expected that although compensation may be needed in the shorter term, a range of benefits from an expansion of foreign trade over the longer term would make the SADC economies less dependent on South Africa (see also ch 6). A continuous process of trade liberalisation exercised with care could therefore be beneficial, although strategies such as tax competition (including profit-shifting) would have to be taken into account especially competition from other regions dominating trade in the developing world, for instance, Asia. This also includes effective commodity tax competition and/or coordination in a future SADC as pointed out in section 5.4.3.

The issues emphasised in section 5.4.3 included the following: (1) although not always administratively feasible, the destination principle can secure most of the neutrality needed in a region which is in a process of trade liberalisation; (2) directly linked to (1), the adoption of a national accounts clearance mechanism operated by SARS or an agreed upon independent revenue authority will be advisable with further integration; (3) governments could consider the adoption of permissible tax rate “bands” for VATs or minimum rates; although (d) a degree of flexibility (applied with care) could drive a “healthy” export-oriented competitive process with automatic harmonisation. The next chapter will focus on capital income taxation in the SADC. The specific objective will be to reconcile this chapter with the chapter 6 in an effort to seek viable strategy options in terms of taxation and macroeconomic stability.

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## **CHAPTER 6**

### **CAPITAL INCOME TAX COMPETITION AND MACROECONOMIC SUSTAINABILITY IN SOUTHERN AFRICA**

#### **6.1 INTRODUCTION**

Never before, for various reasons, has the time been so right for renewal in Africa. These include institutional factors such as: (1) the rule of law, (2) increasing political participation, and (3) greater public accountability together with pressure from civil society for a better management of public resources. The political leaders of Africa are “more focused on proper economic management than many of their predecessors, and they have the maturity to address weaknesses of previous policies” (Asante 2001:491). Sandberg and Martin (2001:429) contend that even though industrialised nations could play an important role in the development of SADC countries, “the ultimate responsibility lies within the community itself”. Structural reform through deeper economic integration rather than other factors such as a growing trade and investment is emphasised, to enhance industrialisation and hence the development of product lines previously imported from industrialised nations or regions. Regional integration schemes should therefore be used as a cooperation mechanism in terms of macroeconomic policy making rather than the expansion of trade or regional convergence. A sound economic and political environment to facilitate the repatriation of an enormous African wealth which is still held outside of the continent should therefore be propagated.

From the economic disparities in the SADC as discussed in chapter 5 (see table 5.2) one may conclude that the SADC is not yet ready for further integration, especially monetary unification. The need to set a uniform convergence procedure or accession criteria (linked to price stability, deficit/debt standards, exchange rate and monetary mechanism and long-term interest rates) for macroeconomic stability to improve economic growth has therefore already been recognised. Chapter 5 provided an overview of fiscal decentralisation and regional integration in Southern Africa but specifically started with an analysis of tax competition and coordination in terms of commodity taxation in the SADC region. To reiterate, it is essential to read this chapter in collaboration with the previous chapter because it elaborates on tax competition (sometimes regarded as a dilemma) and coordination measures specifically in terms of capital income taxation. As in chapter 5, the discussion will have to include an analysis of the argument that a

laissez-faire approach would be appropriate in terms of tax competition for the SADC. Again, competition could lead to a natural process of tax rate convergence and thus a limitation on the growth of governments. On the opposite side of the spectrum it could lead to undertaxation - hence an undersupply of government services (sec 2.3), and thus a dilemma. It is therefore necessary to investigate whether this convergence, also in a macroeconomic sense, has been taking place or will take place in future. To tie in, a final argument will be provided on the importance of public needs in developing countries in comparison to with tax incentives.

The first section of this chapter investigates capital income taxation in more detail with specific reference to the SADC region. The second section extends the analysis with specific emphasis on investment flows and patterns in Southern Africa. The final section concludes with a comprehensive overview of global taxation and key macroeconomic factors in order to find workable convergence criteria for the SADC region.

## 6.2 CAPITAL INCOME TAXATION

As mentioned in chapter 5, the main purpose of this chapter can be closely linked to the tax coordination unit that was established at the NTSA. At this stage a tax coordination subcommittee is working on an input for the SADC Finance and Investment Protocol to be signed in 2004. It is stated that: "Tax co-operation will increase the attractiveness of the region as an investment destination and ensure full advantage from the free trade protocol" (NTSA 2001:90). In the next few sections, this statement will be analysed to establish whether there is any truth in it, specifically in terms of capital income taxation.

The SADC Tax Subcommittee was established on 5 July 2000 and is chaired by South Africa. Its primary objective is "the coordination of taxation policies to the extent necessary to improve efficiency in tax collection, safeguard regional tax bases and reduce obstacles to intra-SADC trade and investment" (NTSA 2001:91). The committee's key tasks include the following:

- (1) the establishment of a comprehensive SADC tax base
- (2) the determination of a common policy in respect of tax incentives, especially those aimed at attracting FDI into the region
- (3) the steady elimination of barriers to intra-SACU trade in an attempt to broaden the potential market and stimulate further domestic and foreign direct investment;
- (4) the identification and promotion of areas in which coordination of direct taxation would



- significantly enhance the attractiveness of SADC as an investment destination;
- (5) building an institutional capacity in member countries, with particular emphasis on tax policy-making and revenue collection through training institutes and tax seminars; and
- (6) the estimation of the compliance gap in respect of excise duties and the introduction of comprehensive programmes to minimise revenue loss from tax fraud

Although some of the above-mentioned issues were addressed in chapter 5, the rest of these issues, especially those concerning capital income taxation, will be investigated in this chapter. As mentioned in section 5.4, the most significant reforms will probably take place in terms of commodity taxation in the SADC, also because of the growing tendency in developing countries to concentrate instead on commodity taxation as the main source of revenue for governments. However, with future integration, for instance, the formation of a common market or economic union, the optimal utilisation of capital income tax bases will become essential in the SADC because these tax bases will become increasingly mobile with the removal of all barriers to entry.

In terms of capital income taxation, the share of corporate tax revenues in total taxes at national (central) level in SADC member countries is relatively low (excluding the DRC and South Africa) compared with those at the subnational level in Argentina, Brazil and India (fig 6.1). In terms of the national level, the SADC countries compare well with these federations. In terms of individual income taxes, the reliance of subnational governments of these federations is also much higher than that of national governments in SADC member countries (excluding South Africa). In the selected federations, the individual income taxes collected are therefore also significantly larger at subnational level than the corporate income taxes collected. In the case of the SADC, the opposite is true about the central level with the exception of Botswana, the DRC and South Africa. There could be several reasons for this phenomenon, some of which will now be discussed.

### **6.2.1 Corporate versus individual income tax burdens**

The first reason relates to the fact that the bulk of the revenues of developing countries come from income taxes, mainly corporate tax which is generally at a level of 6% of GDP and 38% of total revenue (Burgess & Stern 1992; Faria 1995; Black, Calitz & Steenekamp 1999). From figure 6.1 it is therefore clear that capital income tax systems have not yet been fully explored in the SADC and there are various possibilities for broadening the tax base and improving tax

efforts to receive more revenue as a percentage of the GDP from corporate taxes in particular.

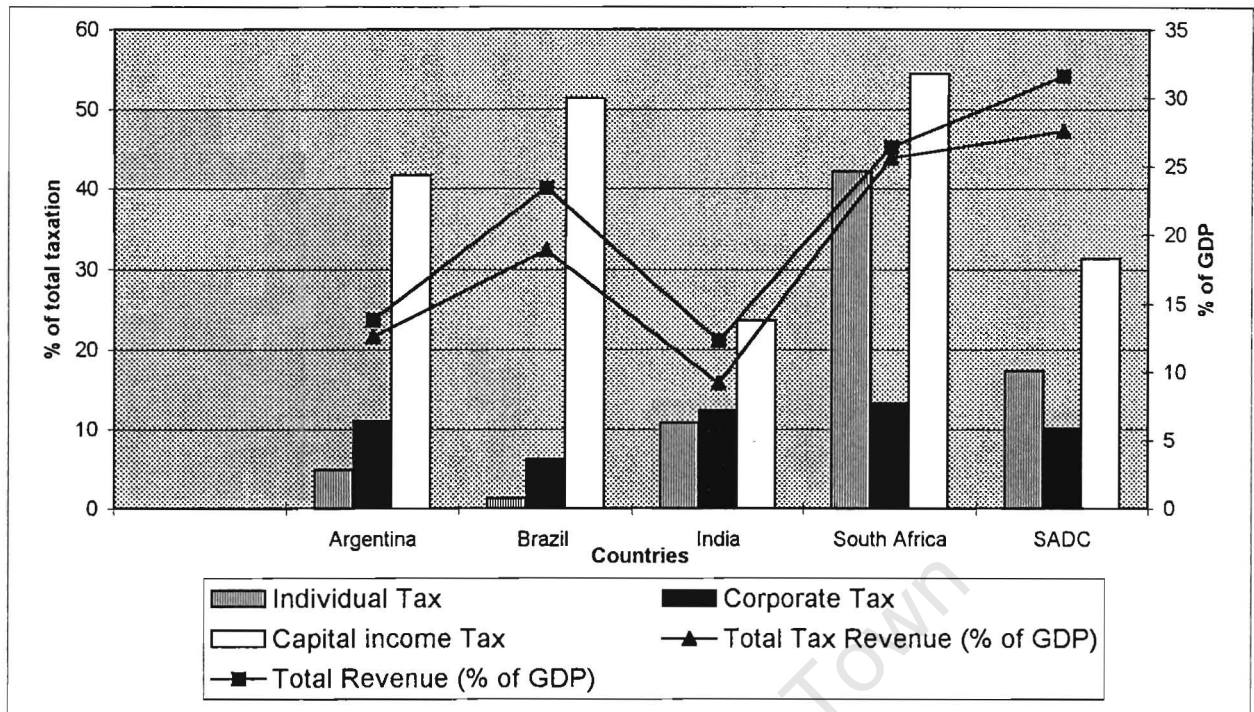
Secondly, as mentioned in chapter 1, taxation levels could relate to the level of development in these countries. The level of development normally determines the size of the tax base but also has an effect on a country's capacity to administer taxes. Varying degrees of development can be observed in the SADC (see sec 5.3). Countries such as Angola, the DRC, Lesotho, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe are classified as low-income developing countries. Countries such as Namibia, South Africa and Swaziland are classified as low-middle-income developing countries with Botswana, Mauritius and Seychelles as high-middle-income countries. Although South Africa is classified as a low middle-income developing country, one should note that the main reason for this is the unequal income distribution within the country and that this economy is generally classified as being more developed by organisations such as UNCTAD. As pointed out earlier (see sec 5.4) some of these countries such as Mozambique, Tanzania, Zambia, Zimbabwe and South Africa have started improved tax administration efforts in order to broaden their tax base. Argentina and Brazil, the two Latin American federations in question, are classified as high-middle-income developing countries and have undergone significant tax reforms (of which some measures have already been discussed), also in terms of capital income or direct taxation.

The Central and Latin American region (including Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Uruguay and Venezuela) underwent significant reforms in terms of corporate and personal income taxes from 1986 to 1992 (Shome 1995). During this period, simplicity and greater neutrality were the norms for reform in terms of PITs. The number of rates was reduced and the rates themselves were scaled down from an average of 7 to 47% of taxable income to 5 to 34%. A tendency developed to reduce the burden of taxation on low-income groups through an increase in the personal exemption level, while the level of income (measured in multiples of per capita GDP) at which the highest marginal tax rate was applied, fell by half. Although the reforms led to a small reduction in the share of the income tax in total revenue, this was consistent with the growing focus on commodity taxes as the main source of revenue for government.

In terms of corporate tax reform in Central and Latin America, simplicity and neutrality as well as equity (through an attempt to reduce tax evasion) were important objectives (Shome 1995). Between 1986 and 1992, the rate dispersion of the CT was reduced and tax rates were scaled

back from a maximum of 42 to 35%. Greater simplicity was achieved as most countries began to treat capital gains as ordinary income. Withholding taxes on foreign remittances fell, thereby bringing closer the domestic and foreign components of corporate taxation. A law requiring minimum contribution (based on gross assets) to the income tax was enacted in a few countries to bolster revenue, notably Argentina, Ecuador, Mexico and Peru, while other countries continued with taxes on net worth and the like. Despite well-meant tax reform and devolution efforts in Argentina and Brazil, governments at different levels became more centralised, as in the case of India, and various problems still occurred in terms of fiscal federalism (see appendix E.3). However, effective and rapid computerised collection procedures and the processing of taxpayer information, facilitating tax payments through banks and setting up large taxpayer units, considerably reduced tax evasion in countries such as Argentina, Ecuador, Mexico and Peru. In South Africa, SARS has undergone the same kind of technological improvements and achieved lower economic costs with higher efficiency in the collection of taxes, with costs as a percentage of the collections at 1,03% in 1999 (see NTSA 2000:72). This compares favourably with international standards which are normally between 1 and 2,5%.

As stated chapter 5, a comparison between figures 5.2 and 6.1 could provide another explanation for the lower corporate tax burdens. It could relate to the *prima facie* shift in tax burdens away from corporate tax burdens (internationally mobile tax bases) to individual income tax burdens and commodity tax burdens (perceived as the less mobile tax bases). A disconcerting feature relates to the fact that in some countries, notably South Africa and Zimbabwe, this shift has only taken place from an overall reliance on corporate taxes to individual taxes. With labour becoming more mobile, especially skilled labour from developing countries (World Bank 2000) and general consumption taxes becoming the fastest-growing revenue sources worldwide, it is almost a sure thing that individual income taxes as revenue source will decline in importance in future.

**Figure 6.1: Capital income taxation in selected federations and the SADC**

Source: See Table B.6.

Furthermore, as pointed out in section 5.4, the average share of capital income taxes as a percentage of total taxation in the SADC is already quite high (31,3%), although there is room for improvement compared with the EU average (41,6%). The attraction of passive and active investment, specifically in developing countries (mostly capital-importing), has become increasingly important and corporate tax burdens have therefore remained low with high individual income tax burdens (see figs 5.2 and 6.1).

Further reasons for the high individual income tax burden as opposed to the corporate tax burden in the SADC, could also relate to the effective tax burden in the region. Effective taxation relates to various aspects of the decision-making process to invest, that is the user cost of capital, as discussed in chapter 3, and will be discussed in greater detail in the sections to follow.

#### **6.2.1.1 Corporate profits and interest income: Residence versus source principle**

The corporate tax base is normally defined as the pretax operating profits adjusted for various allowances. Among these the most important allowances are for depreciation. In most countries,

depreciation allowances are at a uniform rate for the life of the asset – the straight-line method – and are based on historical cost. Typical rates are 5% for buildings, 15% for plant and machinery and 20% for vehicles. There is usually also a series of country-specific allowances. These include accelerated depreciation for certain assets, the application of lower statutory rates to preferred sectors or activity-specific tax holidays, special deductions for particular expenditures such as research and development, and varying provisions for the carry-forward of losses. These allowances generally influence the effective rate of taxation and thus the ultimate decision to invest.

The decision-making process to invest in a corporation is normally determined by the user cost of capital (sec 3.3). The user cost usually includes factors such as the opportunity cost of holding an asset in a corporation. By investing capital in a corporation instead of saving it, interest is foregone. The user cost also includes factors such as the depreciation cost and corporate taxation for the investor. The last factor, corporate taxation, relates to the effective taxation of a corporation. As a rule, the effective tax rate of a corporation is a complex function of the statutory tax rate on corporate income, the extent of double taxation relief and the definition of the tax base, including the system of depreciation. The average effective and marginal effective rate of taxation (METR) is normally utilised in the calculation of the effective CT rate (sec 3.3). These elements usually included or investigated in such a calculation are tax expenditures; the extent of carry-back or carry-forward actions in terms of trading losses, of high debt:equity of deductions for nominal interest costs, of underreporting profits, of applying transfer pricing, of using special and tax incentives, accounting practices in terms of the treatment of inventories (FIFO or LIFO); and (further) exploitive measures regarding the administrative weaknesses of the tax-collecting authorities. All of these will be addressed continuously throughout the next discussion.

The first aspect of effective taxation relates to the definition of the tax base and hence the choice that different countries have to make in terms of the basis of taxation, residence-based or source-based. In terms of the selected federations, the existence of national corporate (and personal) income taxes and the associated exchange of tax information between federal and subnational tax authorities facilitate the implementation of the destination/residence principle (and thus the achievement of CEN) within these federations. Although there seems to be a cooperative and workable relationship between the South African authorities (the National Treasury including SARS) and the rest of the SADC members, it is unclear whether the same kind of information

flows exist between the other members. A lack of exchange of information between SADC members can make the enforcement of the residence principle, as in the case of commodity taxes, much more difficult. Table 6.1 provides more information about the different capital income tax systems in the federations and the SADC. Obviously this information will give a clearer picture of the characteristics of the different tax structures. An extensive discussion of the details provided in table 6.1 is also required to shed light on the information provided.

As stated in section 3.4, corporate profit or direct investment is generally taxed in the source country of the investment, and the residence country generally credits the taxes paid abroad (fully or partly). The deferral of tax on the income of subsidiaries until it is repatriated and limitations on the availability of tax credits give the residence principle various economic effects of the source principle. In practice, the taxation of foreign direct investment therefore closely follows the source principle. The residence and source principle are usually in a hybrid form. Double taxation is avoided through tax credits in terms of the residence principle and exemptions or special provisions (withholding taxes, capital and exchange controls) for foreign-source income in terms of the source principle. In practice, both principles are applied in the SADC.

All of the SADC members apply the source or territorial principle, except for Botswana, the DRC, South Africa and Tanzania which apply the residence principle in terms of individual income and corporate taxes. In effect, the source principle assumes that these countries have the right to determine tax regulations and measures within their territory and that they are sufficiently isolated from the rest of the world to prevent decisions in one country having significant effects on others. Taxing both residents and nonresidents (on income derived at source), that is the GDP, and exempting wholly or partly foreign-source income, guarantees CIN.

As explained earlier, CIN applies when the competitive position of different producers (or sellers) in the same market is unaffected by their country of origin. However, different tax rates apply to domestic and foreign-source income – hence the distorting effect on domestic versus foreign investments. If CIN holds, the lowest-cost producer or seller in any given market will be the most efficient corporation. The source principle is therefore generally more acceptable for developing countries (with a GDP that is normally also larger than the GNP) to attract foreign investment. In contrast, the residence principle is a savings tax and as such involves a higher degree of cross-border equity, taxing both the domestic and foreign-source income of residents equally. This principle should guarantee CEN. If CEN is satisfied, investment will flow to the most efficient locations in a region because corporate investment decisions to invest are

unaffected by tax.

Although nonresidents appear to be unaffected by the residence principle, countries that practice the residence principle normally also tax nonresidents. In terms of the source principle, foreign-source income is usually exempt but in some cases taxable income is included in the tax net by way of special provisions such as source-based withholding taxes or via capital and exchange control measures. The same is valid for the SADC where tax rates and tax bases also differ substantially. Although residents and nonresidents are generally taxed at the same rates, some countries, notably the DRC (residence principle) and Lesotho (previously also Botswana) make provision for lower rates on nonresidents. Countries such as Malawi (previously also Mauritius and Seychelles) make provision for lower rates on residents. Withholding taxes applicable to residents and nonresidents also differ substantially. These taxes also provide moreover for an exemption of dividends, especially for residents, or higher rates on dividends for nonresidents. Withholding rates therefore differ substantially within a band of 0 to 33% on residents, and 0 to 36% on nonresidents, all depending on the specific income involved. Discrimination between resident and nonresident individuals and corporations is therefore nothing strange to the SADC region.

Exempting income, specifically direct investment dividends, derived from developing countries where the source principle is applicable, is a two-sided analysis. Although this analysis has been discussed throughout the study, it is necessary to recap on the relevant arguments. Arguments for and against exemption have been expressed both with reference to the needs of developing countries and within the framework of the tax policy considerations of capital-exporting countries. Two opposing schools of thought have been developed regarding the economic needs of developing countries. The most familiar argument, also shared by policy analysts from less developed countries, is that exemption is an appropriate tax policy for income derived from developing countries. This view is based on three related issues.

Firstly, exemption is generally advantageous to enterprises investing in low-tax countries and may therefore promote more investment in some developing countries that follow a policy of low taxes. Secondly, since exemption leaves the tax burden to the discretion of the host country, it may be said that taxation in other countries does not interfere with the sovereignty of the economic policy of less developed countries. Lastly, exemption does not frustrate the effectiveness of tax incentives granted by developing countries.

On the other side of the spectrum, the benefits derived from exemption for developing countries have been questioned. This ties in with the fact that in some situations exemption may induce firms to repatriate profits early (sec 2.7). Such behaviour may be particularly attractive when a tax holiday is accompanied by a temporary waiver of withholding taxes on repatriated profits. However, this factor has to be balanced against the incentive created in the first place for investment by the prospect of exemption of earnings.

Another problem relates to the widespread use of exemption in capital-exporting countries (see sec 4.4) where this could again lead developing countries to mutually disadvantageous competition with generous tax incentives. Here, one could argue that capital-exporting countries then promote beggar-thy-neighbour and tax competition policies in less developed countries, specifically also in terms of the most mobile sources of income. A country with a limited willingness to grant tax incentives may feel compelled to do so because practically all other developing countries do.

Special deduction or incentive schemes affect the ease of administration and also reduce revenue accruing to the different treasuries. Deductions also influence the choice between investment and consumption. This is illustrated by the difference between statutory rates and METRs, which measures the net effect of interacting fiscal measures (statutory CT rate, depreciation allowances, interest deductions, investment credits, inflation adjustments, etc). An array of these fiscal measures is still present in the SADC region and this may generate METRs on investment which deviate from zero and may be highly variable across assets and sectors.

These METRs are not transparent and it is therefore difficult to determine whether the resulting implicit structure of corporate tax incentives corresponds in any way to policy intentions. The mining sector is a case in point. Throughout the SADC, the mining sector receives special allowances - for instance, in Angola and the DRC lower CT rates are applicable to oil contractors. Here, the METR would be much lower than the statutory rate of taxation, and possibly even negative. A reduction in the statutory rate is a standard recommendation to attract investment. Besides lowering the METR, reduction in the statutory rate would also reduce the average effective rate even if no investment is actually forthcoming. This reduction would entail a windfall gain to the owners of existing stock of capital and a loss of revenue to the treasury even if no investment takes place. An alternative procedure would entail an increase of allowances granted at the time of investment. It would thus only be activated in the event of new



investment and there would be a loss of current revenue only if the investment actually takes place. Furthermore, since the incentive is received at the time of investment, it cannot subsequently be taken back, that is, commitment problems (see secs 2.7 and 3.4) could be avoided. In effect it reduces the investor's uncertainty about the present value of his/her tax obligations.

In the case of lower statutory rates applied to a specific sector such as mining and/or manufacturing, discrimination between the different sectors can easily be detected but often the structure of allowances, differential rates and tax holidays are often so complex that the ultimate effect on incentives is difficult to identify. This kind of discrimination leads to a distortion in the allocation of investment and therefore affects distribution and equity. All sector-specific and all asset-specific discrimination other than those related to depreciation should therefore rather be avoided. In this regard, UNCTAD (1999:183) suggests that the more successful investment-attraction programmes<sup>98</sup> target specific types of investors.

Targeting can help in the following ways: it considers the overall national objectives of FDI (ie priorities for specific sectors, industries and/or sub-regions); it identifies potential investors who are most likely to be attracted by the locational advantages the country has to offer; it fine-tunes promotion efforts to the interest of specific investor groups; and it makes the use of limited investment promotion budgets more efficient. An example of a targeted approach can be found in the SADC is Mauritius which appears to target the textile industry.

The more aggressive targeting strategies therefore focus on the so-called "footloose" and "sunset" industries<sup>99</sup>. Mauritius is a classic example of targeting "footloose" industries. The competition for foreign investments among developing countries therefore becomes relevant and the need for harmonisation of national policies should be recognised. A wide variety of tax incentive schemes are being used by SADC members (see also FISCU, 1999). Although it was stated in section 3.4 that accelerated depreciation allowances are probably the most acceptable type of incentive, the way in which these are utilised also differs across SADC borders. The recommended solution is to rather implement a corporate tax system (eg a cash-flow variant) that

<sup>98</sup> See section 3.3 for a detailed discussion of the desirability of tax incentives.

<sup>99</sup> "Footloose" industries are not location dependent (either resource or markets) and are usually export oriented. Corporations in these industries locate strategically, according to where they can secure a competitive advantage against other firms in specific regional or global markets. "Sunset" industries represent industries that face slowing sales in mature markets, for instance, motorcar manufacturers that will incur the risk of locating in an emerging market in order to secure that market share (see sec 2.7).

makes provision for “full or even partial expensing” (see sec 3.4)<sup>100</sup>.

As mentioned in section 3.4, a significant factor that has to be taken into account is that of tax sparing agreements. If a nonresident firm is taxed on a residence basis and cannot obtain a tax credit in the home country for a tax incentive in the host country, the latter is de facto exporting its tax base instead of providing an incentive. OECD members, for instance, have extensive networks of tax-sparing agreements amongst themselves. Other nonmember OECD countries such as Argentina, Brazil, China, India, Indonesia, Malaysia, Philippines, Singapore, Thailand and Venezuela also have various tax-sparing agreements with numerous OECD members (see OECD 1999:64-69). South Africa probably has most of the tax-sparing agreements in the SADC (only in respect of grants paid by the state for the promotion of economic development) with countries such as Algeria, the Czech Republic, Egypt, Ireland, Mauritius, Pakistan, Romania, Thailand and Tunisia. These countries are, however, not capital exporters of note. For tax incentive schemes to be more effective in the SADC region, in future tax-sparing agreements will have to be concluded with major capital exporters or developed countries. Although these agreements cannot be seen as the alpha and omega<sup>101</sup>, the way forward for the SADC is definitely to negotiate these agreements through organisations such as the OECD.

Although complete consensus cannot be expected to be reached in terms of exemption and with that the utilisation of tax incentives, including EPZs, agreement can be reached on specific points of taxation (in the SADC too). These points include a more comprehensive and targeted approach, that is targeting some sectors for some countries specifically to take advantage for the region as a whole; the maximum length of tax holidays; the relative emphasis on withholding tax incentives and corporation income tax incentives; limits to accelerated depreciation; and the level and scope of the application of investment credits.

## 6.2.2 Capital income tax systems in the SADC

Differentiation (and even discrimination) between retained (corporate profits) and distributed

100 Full expensing occurs when depreciation allowances are such that the net present value of the allowances at the time of purchasing an asset exactly equals the cost of the asset. It is also equivalent to treating capital expenditures as current expenditures and allowing 100% depreciation in the year of purchase. All other deductions associated with the purchase of the asset such as interest payments, would then be redundant. Corporate tax would be collected from the returns on the asset and not the asset itself (although CGT could still exist) and the government would share in the uncertainty associated with investment.

101 Despite the apparent appeal of tax-sparing agreements, the OECD (1999:41) lists a number of concerns relating to: (1) the potential for abuse offered by tax sparing; (2) the effectiveness of tax sparing as an instrument of foreign aid; and (3) general concerns about the way in which tax sparing may encourage countries to use tax incentives.

profits (dividends) is also common in the SADC. Corporate taxation may also involve a double taxation problem (classical system). Corporate profits are taxed in the hands of the corporation (corporate income tax) as well as the shareholders (personal income tax on dividends). Each SADC member deals with the problem of double taxation differently. Table 6.1 indicates that most members have some kind of dividend relief system at the shareholder level or corporate level. In the latter case, corporate profits that are distributed to foreign investors (private investors or foreign corporations) may be taxed in the country where these profits arise (source) as well as in the country where the investor resides (residence). With the different corporate tax systems (double taxation relief systems) that exist in the SADC, dividends are therefore taxed not only by the source countries (under the CT and by withholding taxes, if any) but also by the DRC, Tanzania and South Africa (under the PIT and CT on portfolio dividend income).

Double taxation relief may be at shareholder (SL) or corporate level (CL). Double taxation relief falls into different categories (see sec 3.4), namely: (1) at SL, the imputation system that represents a full CT and PIT with partial or full shareholder credit against corporate tax paid on distributed income or the special PIT rate for dividends at the shareholder level; (2) the modified classical system where full CT but no PIT other than withholding tax (where applicable) is levied, or full CT and PIT with partial shareholder relief unrelated to corporate tax is levied; (3) at CL, the zero-rate method is applied where corporate tax is not charged on distributed profits; and (4) the double taxation of dividends, with or without limited relief. In all cases the combined PIT/CT/burden on debt equals the PIT rate on passive income, while the combined burden on retained earnings is the sum of the CT rate and the capital gains tax rate. In the SADC, most of the countries apply a modified classical system because full CT but no PIT other than withholding tax is applicable. Botswana and South Africa make use of the split rate or dual rate system where distributed income (dividends) is taxed at a higher CT rate than undistributed income, and full relief is given to shareholders. The other countries normally use the single rate system where distributed income is taxed at the same CT rate as undistributed income, and full relief given to shareholders<sup>102</sup>.

The normal argument against the classical or modified classical system is that an integration of the PIT and CT is necessary (Shalizi & Squire 1988:17) for greater neutrality and thus efficiency. The OECD (1991), however, finds that evidence does not unequivocally favour either the classical/new approach, or the full integration/traditional (imputation) approach, and that both

probably contain important elements of truth (see also sec 3.4). In addition, “the introduction of the imputation system may be costly in revenue terms and can complicate international fiscal arrangements” (OECD 1991:52). Although most OECD countries are switching to an imputation system (Messere 1993), only a few developing countries have attempted this system because of administrative difficulties. The World Bank (2000:71) also shows that firms from developing countries such as Brazil, Hungary, Mexico and South Africa issued more international debt at an increasing rate from 1993 to 1998 than before this time period.

The increase in international debt in developing countries re-emphasises the argument that with both the classical and full integration approach, an effective exemption of debt worldwide (secs 3.3 and 3.4) has become problematic. Since 1993, the amount of outstanding international debt issued by all corporations has risen by 75%, reaching \$3,5 trillion in early 1998. Although corporations with their headquarters in developed countries issued most of this debt, corporations from developing countries such as Brazil, Hungary, Mexico, South Africa and Thailand, issued more international debt than ever before. The funding of a corporation with a disproportionate degree of debt as opposed to equity becomes relevant and this relates to thin capitalisation and may be directly linked to problems incurred with transfer pricing. Katz (1995:8) recommends that transfer pricing provisions (sec 3.4) should first be introduced into tax legislation and that thin capitalisation practices initially be countered by the application of such provisions. Transfer pricing provision including capitalisation has already been included in amendments in South Africa’s income tax legislation. It can be argued that this practice should also be followed in the whole of the SADC in terms of anti-avoidance measures.

Statutory CT rates have declined dramatically since 1970s in sub-Saharan countries. From 1975 to 1979, countries such as Malawi and Zambia maintained CT rates of 45 and 65% respectively. More recently, South Africa and Swaziland have also introduced reductions in their CT rates and top PIT rates. In both South Africa and Swaziland, the CT rate is now 30%, whereas the top PIT rate is 42% in South Africa but 33% in Swaziland. The CT rates differ from as low as 15 to 54% and top PIT rates from 15% (Angola) to 65% (DRC). The METRs of all of these countries are even lower if factors such as tax incentives are taken into account. Furthermore, the divergences between CT- and top PIT rates are also relatively high in countries such as the DRC, South Africa and Zimbabwe. These divergences vary, with the highest in the DRC of 20%, 12% in South Africa (if the STC is excluded) and 10% in Zimbabwe. The SADC countries have also

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102 Section 3.4.1.3 contains a detailed discussion of the effectiveness of these systems.

started to rely more heavily on individual income taxes (17,3% average of total taxes) against CTs (10,1% average of total taxes) as a source of revenue.

Table 6.1 also describes the different capital income systems in the federations. Each of the 24 jurisdictions in Argentina imposes a tax on gross revenues (turnover tax) from the sale of goods and services. Most industries and exports are, however, exempt from this tax which will be phased out according to the Federal-Provincial Arrangement of 1993 because of difficulties normally associated with VAT at subnational level. Rates, rules and assessment procedures are determined locally and dividends (distributed profits) are completely exempt. In Brazil, dividends were also exempt as from 1 January 1996. India has the same kind of AMT as the US (see sec 4.4). The AMT has been in force since 31 March 1997 in India and both resident and nonresident corporations are liable to pay tax on their book profits where the net taxable income of the year is less than 30% of the adjusted book profits. The AMT is calculated at the applicable corporate tax rate, like those in the US, on the adjusted book profits. Some industries involved in infrastructure development and EPZs, are exempt. In India, distributing corporations pay a 10% distribution tax on dividends that are exempt in the hands of shareholders. It is therefore relatively clear that all the federations are on a modified classical system which provides for the full exemption of dividends in the hands of shareholders.

Argentina, Brazil and India maintain a residence principle for example, residence rules similar to those applicable in major federations like the US (under OECD membership). The residence principle also describes taxpayers who are liable for tax on their worldwide income. These individuals should be a resident in these countries for a period of more than 183 days or 6 months. A corporation is normally considered to be resident in countries if it has been incorporated into these countries, and its tax domicile is located in the same place as its head office. Nonresident corporations are therefore treated as permanent establishments and are taxed on their source income, and the source rules that apply are also consistent with those exercised by most OECD members. All of these federations provide for tax credits on taxes already paid in other countries through double taxation treaties. Corporate profits are therefore effectively taxed at source, because individuals and corporations are taxed on worldwide income (including interest income) and nonresidents on source income.

Table 6.1: Capital income tax systems in selected federations and the SADC, 1999/00/01

COUNTRY	INVESTMENT INCENTIVES (EPZ) <sup>2</sup>	CT RATE + <u>CGT</u> ON RESIDENTS (%)	CT RATE + <u>CGT</u> & PIT ON NON-RESIDENTS (%)	TAXES ON PASSIVE INCOME (DIVIDENDS, INTEREST, ROYALTIES & FEES) <sup>3</sup>		
				Domestic investors		International investors
				PIT rates + <u>CGT</u> (%)	Passive income (%)	Passive income <sup>3</sup> (%)
Argentina <sup>1</sup>	2 FTZs (tax & duty free)	35	35	0-47/24,5* on foreigners	0 dividends; 6-35* on interest & royalties	10-35*
Brazil <sup>1</sup>	1 EPZ (tax & duty free)	15 & surcharge of 10	15	0-25	0 dividends after 1995	0-25*
India <sup>1</sup>	7 EPZs (5-10 year tax holiday, duty-free imports)	35 + 20 on long term gains	35 + 20 on long-term gains	0-40	0 dividends; 5-20* on interest & royalties	10-48*
Angola	Exemption of 3 to 5 years for new industries	40 (oil industry special tax rates)	40 (oil industry special tax rates)	0-15	15* on dividends	15* dividends
Botswana	IFSC (flat CT rate of 15% for 20 years; exemption for withholding taxes)	15 + additional CT of 10 + 15	25 + 15 & 5-30	0-25 + 50 of gain	15* on dividends; CT/PIT on rest	15*
DRC	Investment & export incentives	45; 7,84 for oil subcontractors + <u>OI</u> **	20; 7,84 for oil subcontractors + <u>OI</u> & 20	5-65 (8 on supplementary income)	20* on dividends, interest; CT/PIT on royalties; 22* on directors' fees	20* & 22 fees
Lesotho	Investment and export incentives	15 on manufacturing; 35 on other; or advance CT of 53,8 + <u>OI</u>	25 + 25 of gain & 25	25-35 + <u>OI</u>	0 dividends (from Lesotho co) but CT/PIT (from foreign co); CT/PIT on rest	25* dividends, interest, fees; 15-25 on rest
Malawi	EPZs (CT rate of 0% for 10 years)	38; 24 on life-assurer + <u>OI</u>	43 + <u>OI</u> & 15 on gross income	0-38 + <u>OI</u>	0 dividends; CT/PIT on rest with 20*	0 dividends; 15* on rest
Mauritius	EPZs (10-20 year tax holiday, no customs duties)	35; 15 on manufacturing textiles	0-35 on offshore co & 5-30	5-30	0 dividends & interest; CT on royalties & fees	0
Mozambique	IFZs (tax holiday of 0-6 years)	35 (10 for agriculture) & municipal surtax + 18 dividends	35 & 15*	8-40 + 18*	18* on dividends & interest	8-25*
Namibia	3 EPZs (unlimited tax holiday)	35	35 & 0-36	0-36	0 dividends, CT/PIT on rest	10* dividends; 0-36 interest & fees; 10,5 royalties
Seychelles	ITZ licence (exempt from all taxes)	0-40	0-40	None	0 dividends; 0 interest (non-financial inst); CT/PIT on rest	0-15*

South Africa	IDZs (duty-free imports) and employment incentives	30 & 12,5 (STC) on dividends (35 employment co, 15-30 small business); formula for mining sector	30 & 0-42 <sup>4</sup>	0-42 <sup>4</sup>	PIT dividends; CT/PIT on rest	0 dividends, 0 interest (except CMA), 0 royalties, know-how 5-12
Swaziland	Investment & export incentives for targeted sectors (special 15%)	37,5 <sup>5</sup>	30 & 12-39 <sup>5</sup>	12-39 <sup>5</sup>	0 dividends of co, 10/20 of individuals; 10 on interest; 0 royalties; 33 fees	12,5/15 dividends; 10 interest; 15 on royalties, fees
Tanzania	Investment incentives for oil & other mining	30 + <u>OI</u>	30 + <u>OI</u> & 0-30	0-30 + <u>OI</u>	10* dividends; 15* interest; 20 royalties; CT/PIT on fees	20* dividends, royalties, fees; 15* interest
Zambia	Tax incentives for farming & nontraditional sectors	35; 30 (listed on ZSE); 35-45 (banks) + <u>OI</u>	35; 30 (listed on ZSE); 35-45 (banks) + <u>OI</u>	10-30 + <u>OI</u>	15*	15*
Zimbabwe	7 EPZs (5-year tax holiday, duty-free imports and exports; special CT rate of 10%)	30 + <u>10/20</u>	30 + <u>10/20</u>	0-40 (& 25 surcharge) + <u>10/20</u>	0 dividends of co, 15/20* of individuals; 20/30* interest, CT/PIT on rest	20* dividends; 10* interest; 5/20* royalties, fees
Notes: * Withheld; OI = Ordinary income 1. The three federations, namely Argentina, Brazil and India apply subnational corporate taxes and the CT- and PIT rates therefore only represent rates at federal level. The capital income tax systems may therefore also differ from one subnational authority to the next. Further details are provided in the discussion. 2. These investment (tax) incentives include a wide variety of incentives mostly in export sectors (see FISCO, 1999 for a detailed discussion of all the incentives given in the SADC member countries). 3. The tax rate applicable to passive income (dividends, interest, royalties and fees) is subject to the double taxation agreements that have been reached between the federations and other countries, and the SADC members and other countries or other SADC members. 4. A CGT will be applicable in South Africa from 1 October 2001. Individuals will be taxed at 25% of the gain against PIT, that is effectively 0 to 10,5%. Corporations will be taxed at 50% of the gains against CT, that is effectively 15% with special inclusion rates for small and employment businesses, business or family trusts, retirement funds, unit trusts and life insurers. 5. The CT rate would have reduced to 30% (the same as for nonresidents) and the top PIT rate to 33% (same as for nonresident professionals) as from 1 July 2001. Nonresident individuals such as sportspeople and entertainers pay a special PIT rate of 15%.						

Source: Compiled from Ernest and Young (1999); FISCO (1999); PwC (1999/00); SADC (2001); UNCTAD (1999)

Residence rules have only been in use since 1998 in Argentina. Originally, Latin American countries generally utilised the source principle. At this stage, however, Central and Latin American countries that apply the pure source principle are Costa Rica, the Dominican Republic, Venezuela, Guatemala and Panama. Countries such as Paraguay and Uruguay, however, do not have any PITs. Argentina, Brazil and India have an extensive list of treaty agreements on dividends (portfolio and substantial holdings), interest and royalties. Portfolio interest received from certain debt obligations and interest paid by banks and insurance corporations to specified foreign tax payers may be exempt from withholding taxes and the withholding taxes on interest are also much lower or zero in most cases. As mentioned in chapter 4, this type of investment is therefore quite attractive, especially to residents from other Central and Latin American countries

bordering on Mexico and the US.

#### **6.2.2.1 The importance of capital income taxation**

The importance of capital income taxation relates directly to the amount of tax revenue that can be effectively collected from these taxes. The lower average share of capital income taxation in the SADC region compared with other regions such as the EU, can therefore also be linked to the role of tax compliance and to this tax avoidance and evasion. The World Economic Forum (1999:29) argues that the extent of tax evasion correlates strongly with the perceived burden of administrative regulations, the composition of public spending, the perceived independence of the civil service and the judiciary, and the extent of favouritism and corruption. Tax evasion also correlates positively although not always strongly with the height of tax rates. With a score out of 59, countries (eg Brazil [39], South Africa [45], China [46], Argentina [48], Ukraine [57], and lastly, Russia) that score low on questions about corruption, violence, tax evasion and organised crime tend to grow more slowly. It is, however, also widely perceived that countries with excessively high tax burdens (Ukraine and Russia) are notorious for the large role of organised crime in their economies.

Alexeev, Janeba and Osborne (1999:4) present a model in which the optimal taxation of a tax-evading firm by a revenue-maximising or Leviathan government with and without the Mafia is investigated. The Mafia which mainly taxes underground sales, makes it more costly for firms to escape official taxation, thereby reducing tax evasion and increasing government revenue. As long as the Mafia is not too strong and the demand is not too elastic, the government's optimal tax rate and revenue in equilibrium are higher when the Mafia is present. This could also partly explain the relatively timid efforts of some governments with weak tax administrations (such as the former Soviet republics) to fight organised crime. It is shown that even if the Mafia becomes "stronger", the government's optimal tax rate does not change and its revenue declines only to the extent that Mafia taxation reduces overall sales.

It is suggested that overall revenue-maximising or Leviathan governments, when faced with tax evasion by firms, may not be too eager to fight the Mafia. However, when the Mafia becomes strong enough and is able to raise its tax rate on above-ground transactions, competition between the government and Mafia for above-ground tax revenues becomes a zero-sum game. In this



case, the government's incentives to combat the Mafia may become stronger. These results are valid only to the extent that taxation represents a net cost to the producers. If the government or the Mafia provides public goods that enhance the firm's output, the outcome may be different. A reduction of tax avoidance and evasion therefore relates directly to the ability of SADC governments to expand their tax bases.

To expand the tax base (also because of tax evasion), a government should know exactly what the possibilities are in terms of taxing different sectors in an economy. The informal and therefore "hard-to-tax" sectors such as the small-scale agricultural sector, small manufacturing firms and artisans, professional services (taxis, panel beaters, hairdressers and restaurants) and other self-employment activities have resulted in excessively narrow, distortionary and inequitable direct tax systems for both individuals and corporations (Taube & Tadesse, 1996). Presumptive taxation has been suggested as a solution, and all of the different methods<sup>103</sup> have been used by SADC members such as Mozambique, Lesotho, Swaziland, Tanzania, Zambia, Angola, Malawi and Zambia (Shalizi & Squire 1988). However, these methods have various shortcomings such as low revenue collection, complicated tax administration, and minimum taxes are generally suitable only to reduce underreporting by larger corporations<sup>104</sup>.

As accounting practices improve, taxpayers can be rewarded through lower income or corporate tax rates, or they can elect to switch from the payment of the presumptive tax to normal income tax. Although the implementation of presumptive taxes on corporate income or personal income has often proved to be difficult, it is still an approach worth pursuing if implementation costs justify the revenues collected from these taxes. The tax should therefore be administered in a "fair" way and the importance of explicit rules to this extent should be emphasised. Another measure that can be used to expand the tax base involves withholding taxes.

In most SADC countries, the taxation of wage or personal income in the formal sectors is much more effective than that of self-employment and nonwage income. The main reason for this is the widespread use of withholding taxes for labour income in large-scale corporations. This

103 There are three basic types of presumptive taxation. Firstly, standard assessments involve lump-sum levies on small-scale businesses, with different occupations or activities attracting levies. Secondly, estimated assessments involve the use of indicators (number of employees, amount of floor space) to estimate a taxpayer's income and tax liability. Lastly, presumptive minimum taxes or an AMT involve the collection of minimum taxes based on turnover of assets.

104 Steenekamp (2000:419) investigates the underreporting of corporate revenues in South Africa and suggests a minimum tax of 3 to 4% on gross fixed assets with appropriate exemptions. It is suggested that horizontal inequities that exist within the corporate tax system, that is that all corporations do not pay their fair share of the tax, can be addressed via a minimum tax. However, a further investigation of this kind of tax falls outside the scope of this study.

effectively reduces the number of collection points and essentially transfers the burden of tax collection to the employer. Most large employers find the scheme straightforward to implement and the increased costs – in addition to the normal costs of administering the payroll – are relatively minor. The DRC, for instance, also withholds social security contributions from foreign workers if they cannot prove that they are already paying social security in their countries of residence. Withholding taxes are therefore used extensively in the SADC and are applicable to a large category of income, including interest and dividends (table 6.2). If appropriate allowance is made for crediting withheld taxes, the use of banks and corporations to withhold taxes on capital income should result in an expansion of the tax base and improvement of revenue collection. An extensive network of double taxation treaties should therefore also exist.

Double taxation agreements (DTAs) are necessary to avoid double taxation of individuals and corporations, and it is here that the SADC members fall short. Mauritius and South Africa have the most extensive list of double taxation agreements in the whole region. Where no treaty exists, unilateral credit relief is normally supplied by SADC countries to residents for the burden of the tax levied as a consequence of the lack of an agreement. South Africa has a DTA with Mauritius, and all the DTAs signed or being negotiated with Mauritius are included in South Africa's list which is even more extensive (NTSA 2000). It is clear that both Mauritius and South Africa rather need to negotiate double taxation agreements with SADC members that are still excluded from these lists. These members also have to extend their lists of double taxation agreements to avoid excessive tax burdens which could have a harmful affect on future intra-regional investments. The effect of capital income taxation on investment decisions should therefore be investigated for future utilisation.

### **6.3 INVESTMENT FLOWS IN THE DEVELOPING WORLD WITH SPECIFIC EMPHASIS ON THE SADC**

The distribution of world FDI inflows remains uneven in developing regions. In 1999, Asia received 22%, Latin America and the Caribbean 14% and Africa 1,2%. Despite the Asian financial crises in 1997 to 1998, countries such as China (Hong Kong), the Republic of Korea, Singapore, Thailand, Malaysia and India attracted most of the FDIs. In Latin America and the Caribbean, countries such as Brazil, Argentina, Mexico, Chile and Venezuela attracted most of the FDIs. By the year 2000, the MERCOSUR countries (specifically Brazil) obtained the greatest share of the region's FDI despite economic stagnation and the instability resulting from

the currency devaluation at the beginning of 1999. Wangwe and Musonda (1998:154) argue that investment in Africa declined significantly between the 1970s and 1990s, from nearly 26% to a little over 16% of the GDP. This declining tendency can also be observed in African countries with the most successful reforms. Despite the efforts of various structural adjustment programmes by the World Bank and the IMF, Africa's share of global FDIs remains negligible and is concentrated mainly in five countries, namely Angola, Egypt, Nigeria, South Africa and Morocco. The fact remains - Southern African countries need macroeconomic reform, but despite this recognition, it remains questionable whether these and other African countries will attract the necessary "quality" FDIs needed (see table 6.3 for evidence of the South African situation). Various authors therefore argue in favour of a so-called "Afro-pessimism".

Major factors listed by UNCTAD (2000) for recent investment successes in developing regions specifically include the pace of privatisation and factors such as deregulation, liberalisation (economic reform), and with domestic and regional stability second in line. The greatest investment share in terms of privatisations between 1990 and 1998 also went to South Africa (UNCTAD 2000). The World Bank (2000:81) consequently lists the most important factors in attracting foreign investment as follows: (1) adopting complementary human capital policies; (2) liberalising trade policy regimes; (3) avoiding inducements (incentives and protective regimes in terms of imports and licensing arrangements) for foreign investors; (4) creating a stable set of rights and responsibilities for foreign investors (including commitments and investment accords or guarantees such as those observable within the EU and MERCOSUR); and (5) developing stock markets as alternative funding sources. UNCTAD (1998:91) further lists tax policy as only one of various determinants influencing the locational choices of foreign direct investors. It is also realistic to argue that for the wide array of tax incentives offered by SADC member, the level of FDIs should have been much higher by now. In this regard, the negotiation of an increasing number of bilateral investment treaties and double-taxation treaties is underlined and also reflects the growing role of FDIs and developing countries' desire to facilitate them.

Shah and Slemrod (1990:2), for instance, found that in the case of Mexico, FDI was extremely sensitive to changes in domestic tax rates relative to those of investing countries. The authors do, however, point out that, in addition to taxation, the regulatory framework and overall economic and political climate in Mexico have a substantial impact on FDI transfers and reinvestments. Asante (2001:484) concludes that experience has shown that investors choose countries with stable political and economic environments. In this regard, Southern Africa faces the challenge

of restoring macroeconomic stability by creating certainty and investment confidence. The quality of FDIs, that is in the form of technology instead of hard cash, is emphasised in this regard. An exclusive role for taxation as a determining factor in investment flows is therefore an elusive concept. Empirical studies tend to be somewhat inconclusive, also in a developing context, about whether lower tax rates have a positive effect on savings, investment, and work effort and whether they lower tax avoidance and evasion and consequently increase tax revenue (see Gandhi 1987). Lower tax rates also conflict with the equity objective. However, the attractiveness of lower tax rates still carries substantial weight worldwide because of the growing challenge of globalisation and technological change as observed in this chapter and chapter 4.

Nellor (1999) suggests that the design of tax regimes supported macroeconomic incentives which triggered the recent Asian financial crisis even though tax policy was not its primary cause<sup>105</sup>. Tax distortions (provisions), specifically those relating to foreign currency funding and attracting foreign capital, developed<sup>106</sup>. Tax competition became a major instrument to attract foreign capital with innovative tax breaks creating a myriad of tax arbitrage possibilities. These possibilities made the task of tax administrators already burdened with the growing scale of complex capital flows, even more difficult. A group such as ASEAN focused on trade and investment policy which encouraged free trade and flows between its members. Harmonisation guidelines, or other forms of coordination which many developed economies (ch 4) are already pursuing, were not explored. Tax bases were eroded as more tax administrations found it increasingly difficult to tax capital returns that were difficult to capture (eg interest income) and simply exempted these forms of capital. Fiscal (tax) incentives such as reduced import duties on machinery and raw materials, income tax holidays and reduced income tax rates thereafter with additional incentives to corporations in special investment zones and EPZs, exacerbated the problem of eroding tax bases even further. Various tax systems also facilitated the favourable treatment of debt over equity without thin capitalisation rules (see section 3.4) and this aggravated the overall structural problems in Asia (Nellor 1999:12-17).

The experience in Asia again emphasises the complexity and volume of financial transactions, associated with the opening of emerging markets, making the task of tax administrators more

105 Generally it has been suggested that the main factor that triggered the Asian crisis was inconsistencies in macroeconomic policies, with other factors relating to financial sector supervision and regulation and capital account liberalisation.

106 For example, the tax system treated capital flows (foreign funding and borrowing) favourably, especially those intermediated through the banking system with all kinds of tax breaks for the financial sector. Effective tax rates on capital were kept low by the constraints on tax administration resulting from technological change such as the application of conventional taxes on income from capital as, suggested in chapter 2.

challenging. Just as the strengthening of financial systems is a prerequisite to capital account liberalisation (see World Bank 2000:73-79), tax administrations also require strengthening in an ever-increasing competitive environment before pursuing all kinds of innovative mechanisms to attract capital. Furthermore, international or regional cooperation is required to successfully apply global tax reform, for instance, the application of the residence principle (see ch 4). Table 6.2 provides a clear picture of the extent of financial liberalisation in the selected federations as well as in the SADC region.

**Table 6.2: Financial liberalisation**

COUNTRIES	STATE OWNERSHIP OF COMMERCIAL BANKS	FIXED EXCHANGE RATE	GOVERNMENT INTERVENTION IN ALLOCATION OF CREDIT	EXCHANGE CONTROLS ON CURRENT ACCOUNT	COUNTRY CREDIT RATING (2000)	CAPITAL CONTROLS
Argentina	---	---	---	---	---	√
Brazil	---	---	---	---	---	√
India	---	---	---	---	---	√
Angola	√	√	√	√	12,6	√
Botswana	---	---	---	---	57,0	---
DRC					8,0	
Lesotho	√	---	---	---	26,9	√
Malawi	√	---	---	---	19,5	√
Mauritius	---	---	---	---	52,4	---
Mozambique	---	---	√	√	19,2	√
Namibia	---	---	---	---	39,7	√
Seychelles					31,9	
South Africa	---	---	---	---	45,2	√
Swaziland	√	---	---	---	29,7	√
Tanzania	√	---	---	---	19,1	√
Zambia	---	---	---	---	15,2	---
Zimbabwe	√	√	---	---	24,1	√

Source: World Economic Forum (1999)

The inadequacy of prudential supervision and regulation is also emphasised in financial integration and liberalisation, specifically in developing regions. An important role develops for the adherence to world-class standards of accounting, auditing and information disclosure. These facilitate the enforcement of corporate governance and protect investors and lenders from fraud and unfair practices (López-Mejía 1999)<sup>107</sup>. In terms of financial integration in the SADC region, the structure and regulatory framework of member countries still needs significant adjustment. The most noticeable progress is taking place in the areas of clearing systems, stock exchange listing requirements and central bank policies. Even in the federations, capital controls are still in place (table 6.2). In Argentina, a total of 5 out of 14 capital controls are still in place.

<sup>107</sup> López-Mejía (1999) lists the causes, consequences and policy responses of large capital flows in the 1990s in developing regions such as Asia, Latin America and CEECs with the emphasis on the financial crises in Mexico (1994 to 1995), Asia (1997) and Russia (1998) as well.

The Brazilian capital market is much more regulated with a total of 12 out of the 14 capital controls still in place. This compares well with African countries such as South Africa (13) and Zimbabwe (14).

With regard to the SADC, Angola is the most regulated financial market with countries such as Botswana, Mauritius and Zambia with no controls at all. Here, the role of the South African economy, especially in terms of issues such as capital account liberalisation (the only outstanding factor in terms of full financial liberalisation) and the concomitant tax policy, should be investigated. The importance of the South African economy has long been recognised and in table 6.2 one can clearly see that the economy had the highest credit rating (45,2) of all SADC members in 2000. Summers (2000:352) concludes: "...there is no global, economic and financial issue that has more human consequence than what happens on the African continent. There is no country (ie South Africa) that will be more crucial to what happens on this continent than yours".

### **6.3.1 The South African economy**

South Africa has the largest and most developed economy in the SADC, and South Africa has the capacity to raise its exports to the SADC without necessarily requiring large-scale investment in additional capacity (see sec 5.5). Although South Africa stands to gain disproportionately more than its neighbours from the SADC FTA in terms of an expanding two-way trade, the SADC arrangements are less important to South Africa's overall growth rate than they are to the rest of the region. Polarised development of South Africa also does not mean that the smaller less-developed SADC economies will not gain from further economic integration. Firstly, South Africa still faces the same difficulties in maximising the gains from its WTO commitments or the potential gains from any agreement such as, the EU-SA FTA. Secondly, the economy is characterised by a severely sub-optimal performance (SARB:S-147). Owing to the low level of average growth, unemployment is a major problem. Data also indicate a so-called "jobless growth". The low level of growth impacts negatively on savings, which in turn impede growth as a result of a lack of foreign capital to finance the required level of investment that would so alleviate the unemployment problem. Spatial disparities still persist and the population is growing at a rate of more than 2% annually. Thirdly, the unequal spread of incomes along racial lines also impacts on the South African economy. Although it did improve with a smaller disparity between the black and white populations from 1991 to 1996, disparity is still clear

along racial lines, specifically between white and black populations (Whiteford 1996). In the last instance, many South Africans are therefore still in the same boat as their counterparts in the rest of the SADC, especially when it comes to the Aids epidemic. Additional factors include the mobility of capital and labour in the SADC which could have a significant effect in terms of Tiebout-type competition (sec 2.2).

#### **6.3.1.1 Investment flows in South Africa**

There is freedom of movement for capital and labour in the individual countries. This also applies to South Africa, although formal sector wages are much higher there than in the other SADC countries (McCarthy 1999:388). In the SADC, however, the constraints on labour mobility between countries are significant. Capital is more mobile, especially from South African sources into the region in the form of direct investment. The SARB allows corporations to invest in SADC economies through a differentiated relaxation of foreign exchange control which favours investment in the region. This also signifies the South African government's commitment to encourage business operations in the development of the region. South Africa is the leading source of FDI in the SADC, with mining ventures at the forefront, followed by retail and wholesale activities in the hotel and leisure sector and manufacturing. South African corporations have invested approximately R2,5 billion in other SADC countries since 1995 (Business Map 1998). As mentioned earlier, South Africa is also the largest recipient of FDI in the SADC. It has a large modern sector which is dominated by a sophisticated private business sector which is generally absent in other SADC countries. This sector also makes South Africa the most competitive in the region, with an overall competitiveness ranking of 42 out of 49 countries worldwide (World Competitiveness Report 2001). The ranking places South Africa between the federations India (at 41) and Argentina (at 43). All these factors can be linked to the size of the economy and the existence of a well-developed infrastructure.

Considering the above-mentioned, South African producers could possibly relocate in neighbouring countries because of lower wage costs. This differs from the conventional form of trade deflection associated with FTAs, that is directing imports through the country with the lowest tariff. This problem requires that rules regarding the country of origin be developed and (as mentioned earlier) that difficulties in the SADC involve the determination of the origin. This could also urge the SADC to develop directly into a CU. In contrast to capital mobility, one can expect labour to move in the opposite direction, that is the illegal flow of large numbers of

migrants (unskilled) seeking job opportunities which are normally available at higher wage rates. The brain drain of skilled people does, however, also occur from the region into South Africa. In this regard, South Africa provides public services to nonincome taxpayers (migrant workers).

In so far as income taxes are deducted at source from the wages concerned, the question arises whether they should accrue to the tax jurisdiction in which the workers reside or to the tax jurisdiction in which the taxes were earned. The general argument in favour of the latter procedure is as follows: It is the fiscal authority under which the income in question is produced that finances the infrastructure and services that make production possible. It also provides much of the infrastructure used and the social services consumed by workers employed outside their areas of residence. With South Africa now on the residence principle, nonresidents are still taxed on a source basis. The illegal segment of these migrant workers can, however, still commute between countries without paying South African income tax. Positive externalities or spillovers of public services are therefore still present. Regarding direct investment, the Katz Commission (1994:213) concludes that tax considerations ranked sixth in importance in the international community as a factor that influences investment and trade (after factors such as political, economic and labour stability). In this context, it is therefore also important to investigate the influence that tax policy could have on investment patterns.

According to Van der Walt (1994:107), the debate on the determinants of FDI in South Africa is characterised by misconceptions. Most of the arguments address only the factors that encourage or discourage FDI flows, instead of establishing a general framework for explaining FDI behaviour. Exchange controls, for instance, frequently came under attack and it was claimed that FDI would increase when exchange controls were lifted. Other arguments included factors such as a lack of political stability; costly, unskilled and militant labour; relatively high domestic production costs; low productivity; protectionist industrial and trade policies; and the smallness of South Africa's domestic market compared with emerging markets. The influence of taxation in South Africa on direct investment (more specifically FDIs), savings and consequently economic growth, is not specific, although present. Various other studies have also been conducted in a similar fashion with differing results (Simson, Newport-Gwilt & Reinhardt 1998:136; see also Du Toit 1999). Some of these studies reject the endogenous growth model because of decreasing returns that is increasing costs, and the neoclassical growth model on the premise that a reduction in taxes on consumption rather than investment has a greater impact on output.



Schoeman, Robinson and De Wet (2000:241) suggest that fiscal discipline and not only taxation has an influence on FDIs. Fiscal discipline is represented by the deficit/GDP ratio and a risk index is included for investing countries with three components, namely a foreign debt/GDP ratio, interest payments/export earnings and the extent of the import cover. Results show that the tax burden and the deficit/GDP ratios impacted negatively on FDI in the 1980s and 1990s, mostly from South Africa's largest investor during this period (the UK) and therefore on economic growth as a whole.

Different factors could be responsible for the significant (negative) impact of the tax burden in South Africa on FDIs. A heavy dependence on a few instruments (CT, PIT, VAT), applied at high rates to a limited number of taxpayers, resulted in severe distortions in relative prices, giving foreign investors the wrong signals. Various changes and tax law amendments have, however, taken place since 1994, as part of the South African government's commitment to a base-broadening policy of taxes and overall fiscal reform. Since 1994, nonresident shareholder tax has been abolished and the corporate tax rate was lowered to 35% in 1990 and to 30% in 1999 (although a 12,5 STC is still applicable on declared profits). Further amendments included the incorporation of transfer pricing and capitalisation provisions in the Income Tax Act (Katz 1994; 1995). The South African government pursued various supply-side measures such as accelerated depreciation allowances and tax holidays as part of its macroeconomic strategy for growth, employment and redistribution (GEAR). As part of its base-broadening approach, however, government withdrew many tax incentives and tax preferences to corporations which also included the nonextension of the accelerated depreciation allowance and tax holiday scheme that expired 30 September 1999. An extensive list of tax expenditures (Katz 1994:206), however, remained in place, which lowered the effective tax rate even further (Steenekamp 2000:406). An investment incentive was, however reintroduced in the government budget of 2001/02 for small and medium enterprises in the form of an accelerated depreciation allowance, and again a question mark has to appear behind the efficiency of these incentives. It was further announced that SARS would conduct a review of the low effective tax rate enjoyed by banks. Banks came under the spotlight because they can defer and avoid tax by using DFIs and structured, asset-based finance techniques which are observable worldwide (see also sec 4.4).

Further tax law amendments in South Africa included a switch from the source to the residence principle of taxation. Despite the Katz (1997:36) recommendation that South Africa should

basically stay on the source principle<sup>108</sup>, South Africa ultimately adopted the residence principle from 1 January 2001. The taxation of foreign dividends became taxable under income tax amendments from March 2000. Historically, dividend income received by South African residents has been exempted from tax<sup>109</sup>. The 2000 amendments therefore sought to change this by specifically introducing legislation to tax dividend income received by South African residents from foreign source income with some exemptions. The annual individual interest exemption of R4 000 (taxpayers under the age of 65) is extended to include foreign dividends that would otherwise be taxable. Residents who are taxed on foreign dividends will, subject to certain conditions being met, be entitled to claim credit relief, against their South African tax liability for foreign taxes already suffered<sup>110</sup>.

Under the new residence principle, South African residents will therefore be required to include all their worldwide revenue receipts and accruals as gross income and then deduct any exempt or excluded income. Nonresidents will remain taxable on their South African source income only, and source considerations will therefore continue to apply for them. The proposed change is therefore intended to expand the tax net, improve fairness (source and foreign-source income on an equal footing) and to establish a global presence for South African corporations.

As stated repeatedly in this study, the application of the residence principle has significant drawbacks that have evoked increasing criticism (Tanzi 1995): (1) Taxes tend to be deferred until realised<sup>111</sup>. As pointed out in section 3.4, increasing attention has also been focused on limiting the benefits of the deferral provisions for passive income. In terms of South Africa, corporate earnings abroad have to be repatriated after six months. (2) The shifting of residence by individuals or recipients of income other than natural persons (ie funds) cannot be easily accommodated. (3) The tax administration of the country of residence is not always capable of acquiring information on income from foreign sources. It is therefore questionable whether a residence-based kind of system would be administratively feasible for a developing country,

108 It was suggested that active income (that is corporate profits) be taxed on a source basis, and that passive income (that is all income that is not active income, ie interest income, royalties and fees) be taxed on a residence basis. Foreign-source income such as expatriate status for South African labour abroad and untaxed foreign dividends, would therefore still stay in place.

109 The only tax on distributed profits was the STC which is a tax on a corporation's profits distributed as opposed to a tax on the dividend received by the shareholder.

110 "Residents" in this context refer to individuals who are "ordinarily resident" in South Africa and corporations which have their place of effective management in the country. For residents not ordinarily resident in South Africa for the whole tax year in question, the internationally recognised norm is the physical test of presence. Under this test, a natural person is viewed as a resident when (1) physically present in South Africa for at least 91 days in the relevant tax year as well as each of the preceding three years of assessment; and (2) is on average, physically present in South Africa during such preceding three years of assessment for a period of or periods exceeding 183 days per year. The definition of "investment income" (CFC legislation) has been amended to include foreign dividends. Foreign dividends received by or accruing to a foreign controlled entity may therefore be deemed to be included in the taxable income of South African residents in certain circumstances.

111 The last criticism raises a number of problems in defining income, in addition to the traditional issues of the character and timing of investments. In respect of DFI's specifically as discussed in section 3.4, it is difficult to classify DFI's into the established categories common to most tax systems and recognised by double-taxation treatise (see Alworth 1997:211).

specifically on portfolio income where information flows between countries are of the utmost importance (see secs 2.3 and 3.4).

Questions are also being raised about how the new residence principle will treat taxable operations in low-taxed countries with rates below 27%, that is well below the 30% rate (effectively 37,8% when it declares the full amount as dividend) in South Africa (Tomasek & Grote 2001)<sup>112</sup>. Although South African residents are therefore liable to pay tax on their foreign earnings even if such earnings are not repatriated but left to accumulate in the investment, the bulk of South African offshore investments seems to be in tax havens (see Gidlow 2001) where favourable local tax treatment, confidentiality and greater protection against insolvency are provided. The unequal distribution of income in South Africa and other developing countries poses a variety of problems: Firstly, as far as the distribution of income of South Africans is concerned, the poorest 40% earns 2,4% and the wealthiest 10% earns 53% of the total income, with a Gini coefficient of 0,69% (Whiteford 1996). In comparison, in Argentina, the richest decile receives 40% of national income, whereas in the US it is less than 30%. A small portion of society therefore pays income taxes and any increase in the tax rate could destroy the fragile tax base.

The wealthiest part of society is capable of postponing the payment of taxation indefinitely and therefore evading it (section 2.3). If the share of income taxes becomes smaller, this will mean that the share of other sources of revenue, for example VAT, will have to increase. The tax base will, however, be inadequate to carry this burden. South Africa's switch to a residence principle is therefore surprising besides the fact that its GNP has exceeded its GDP by a margin of 2,2% over the last five years. Although the country has effectively become a capital exporter, capital imports (foreign direct investment) still seem to be lacking. The latter is evident from table 6.3.

Net capital flows to South Africa became extremely volatile after the mid-1970s, following political incidents such as the Sharpeville uprising in 1976. The volatility (and negative tendency in net capital flows) became even more evident after 1984, which will be remembered for the so-called "Rubicon" speech of the then prime minister, Mr PW Botha. This had a very negative impact on investment and hence on economic growth and job creation in South Africa, especially

<sup>112</sup> The residence system (under the Income Tax Act 58 of 1962, as amended) is fully intended to tax foreign branch income of MNCs and create partial immediate taxation of foreign subsidiaries that are more than 50% owned by South Africans. Before amendments to legislation, South Africa tax did not apply to the income of a controlled foreign subsidiary until the income was repatriated to South Africa. Under the new system, South African tax will apply to CFC's income as it is earned, as in the US.

in view of South Africans low savings propensity. Government savings, in particular, as well as personal savings performed poorly. The savings/GDP ratio reached a maximum of 35% in 1981, whereafter it declined to below 15% in 1998 (SARB:S-130). During the same period, the investment/GDP ratio declined from 33% to approximately 16%. The country is therefore largely dependent on foreign capital, not only to bridge the current gap between savings and investment, but also to expand investment to more acceptable levels.

**Table 6.3: Direct and portfolio investment flows in South Africa (Rmillion)**

Year	DIRECT INVESTMENT <sup>1</sup>	PORTFOLIO INVESTMENT
1991	111	666
1992	-5 514	4 950
1993	941	2 417
1994	-3 040	10 008
1995	-4 557	9 020
1996	-970	9 576
1997	6 756	30 580
1998	-6 471	20 375
1999	-2 700	52 400
2000	2 200	-13 800
Note: 1. Direct investment refers to (1) the investment of foreigners in undertakings in South Africa in which they have individually or collectively at least 10% of the voting rights, or (2) the investment of South African residents in undertakings abroad in which they have at least 10% of the voting stock (SARB, 2001).		

Source: SARB (March 2001)

Although table 6.3 shows that South Africa experienced a net inflow in terms of direct investment of R2,2 billion in 2000, an outflow to the value of R1,3 billion from South African domiciled corporations was experienced in the same year. Corporations with some of the largest market capitalisations on the JSE such as Billiton, Dimension Data, Old Mutual and the South African Breweries (SAB) also delisted from the JSE to list on the LSE. Of particular significance is the fact that these corporations are “leaving” South Africa for “greener pastures” in terms of the newly created global presence because these corporations also represent some of the largest investments in terms of mineral exploration in the SADC region.

Although the benefits of foreign exposure for South African corporations (eg heightened

competition and technological advancement) are not denied<sup>113</sup>, it is clear that South Africa does not only need FDIs, but also needs to maintain its largest internal assets (its domestic corporations). Initial macroeconomic estimates indicated that South Africa needed GFDI of about 25% of GDP annually. However, since 1994, investment as a percentage of GDP has fluctuated around 16% and as a result GDP growth itself has been lower than expected (NTSA, 2000:26). The economic costs incurred by a country losing the listing of a blue-chip corporation is obvious because a good source of foreign investment capital disappears permanently, and its tax base narrows forever in that such a corporation are now liable for UK taxation. Although the UK and South Africa have similar corporate tax rates, the former is on an imputation system which means that a PIT credit is given at shareholder level for corporate taxes already paid, and the shareholder benefits. In South Africa, corporations prefer to refrain from declaring dividends and retain profits, which in itself is not advisable (see sec 4.5).

In 2000 an outflow of portfolio investment (R13,8 billion) was experienced as domestic institutional investors such as pension funds continued to purchase fixed-interest securities and shares through the asset swap mechanism. Life insurers and pension funds are allowed to hold 15% of assets offshore and unit trusts 20%. Many institutions in South Africa are close to their limits (Cohen & Steyn 2001) and those that are, no longer permitted to swap local assets for offshore assets, because the asset swap mechanism was shut down in the government's national budget of 2001/2002. The asset swap mechanism was designed to protect the rand from the rush offshore. The original intention was therefore that for every R1 swapped, the country would receive the same amount back in investment. However, there were many loopholes and the balance of payments has taken severe strain because institutional investors have taken R100 billion out of the country since 1995. The cancellation of the asset swap mechanism can therefore be seen as reverting back to stricter exchange control measures on portfolio investment in particular.

From a private individual side, a further R17,4 billion has left South Africa since the inception of the offshore investment allowance<sup>114</sup> in July 1997. The latest outflows are reflected in the strong contraction of the surplus of South Africa's financial account, often considered as the bottom line of the balance of payments. For 2000 as a whole, the country's surplus on the financial account

113 Only three African corporations, all South African, appeared on the UNCTAD (2000) list of 50 largest MNCs in developing countries based on 1998 foreign assets. These included Sappi Ltd, Barlow Ltd and SAB.

114 Under the investment allowance, private individuals – South African residents who are over the age of 18 and have a certificate of good standing from the tax authorities – are permitted to take R750 000 out of the country. The limit on what individuals are allowed to take out

contracted from R29,5 billion in 1999 to R8,5 billion. The surplus is little above the total outflow through the investment allowance between February and December 2000. However, there was a sudden switch from a R10,9 billion surplus in the third quarter of 2000 to a R1 billion deficit in the last quarter of 2000. The SARB (2001) maintains that this is not because of the uncertainty in Zimbabwe in the market but the heightened risks in emerging markets. Tax implications could be a further motivation in that private funds are seeking tax-sheltered alternatives to the imposition of the residence principle (savings tax) and the capital gains tax that will become effective from 1 October 2001. Although exchange control measures have therefore been relaxed since 1994, the most recent budget (2001/2002) did not make provision for any further offshore investment allowances.

A further notification is that national savings declined from 27,1% of GDP in the period from 1979 to 1984 to 16,1% of GDP for 1994 to 1998 with debt commitments standing at 56% of disposable income in 2001. Although the effect of taxation on household savings is ambiguous because of the offsetting effects of income and substitution effects and empirical evidence is not compelling (see OECD 1994), questions can be raised about how the introduction of a residence-based (distortive in terms of savings) will affect national savings. The South African government maintains that the previous source-based system provided artificial incentives for capital to move abroad and that the new residence principle (Tomasek & Grote 2001) will improve horizontal fairness and equity in general<sup>115</sup>. Although this is partly true, the worldwide concern about effective information flows, particularly concerning the most mobile forms of capital (eg interest income) between countries (secs 2.3, 3.4 and 4.5), now applies to South Africa too. Exchange and capital controls are also still in place and tax cuts and incentives to attract investment (although targeted) are still regarded as priorities in the South African Budget of 2001/2002<sup>116</sup>, whereas a source-based system is normally associated with the attraction of investment (CIN) with foreign-source earnings being treated favourably. The adoption of the residence principle by the South African government must therefore also be seen in terms of the larger context of the SADC region.

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on a once-off basis was progressively raised from R200 000 in 1997.

115 The following income is being taxed under the residence principle in South Africa: (1) mobile foreign passive income such as dividends and interest from foreign portfolio stocks and bonds; (2) mobile foreign business income such as businesses that can be located anywhere (such as e-businesses) but are located abroad to save taxes; (3) diversionary foreign business income such as situations that would probably lead to transfer pricing that artificially shifts SA taxable income offshore. Transfer pricing is still seen as a problem area in that South African MNCs shift huge amounts of taxable income offshore through related-party sales and services at overinflated or underinflated prices (Tomasek & Grote 2001).

116 Measures announced to attract investment include new tax incentives for strategic industrial projects and job creation, better tax depreciation rules for small businesses and an extra R7,8 billion for infrastructural projects (NTSA 2001).

## 6.4 A COMPARATIVE SUMMARY OF TAXATION IN A GLOBAL CONTEXT

Before continuing the discussion of any taxation in developing regions, it is important to first formulate a uniform perspective of what has been discussed thus far. This means that a comparative analysis of tax revenues in developing regions against developed regions is necessary to point out whether tax competition has had any effect at all in this compilation. For the sample of developing regions in table 6.4, the ratio of income to commodity taxes was about 0,5 in 1985 to 1990, compared with 1,6 for OECD countries. For both groups, this ratio remained almost unchanged a decade later. Another difference between these regions is the ratio of CT to PIT. Developed regions raised approximately four times as much revenue from the PIT as from the CT, while developing regions raised more revenue from the CT than from the PIT. The differences in wages and salaries, in the sophistication of the tax administration, and in the political power of the richest decile between the two groups, are some of the factors that contribute to these differences in the importance of CT and PIT as revenue sources. Finally, revenue from trade taxes has been significantly higher – although decreasing – in developing regions (4,7% of the GDP in 1985 to 1990 and 3,9% in 1995 to 1998) than in developed regions (less than 1% in both periods).

As previously mentioned, the average corporate tax rate among OECD countries decreased after 1995 to an overall 34,8% in 1999 (see fig 4.3 for the EU average). Corporate tax rates are, however, even lower in developing countries where the attraction of FDIs has become cardinal, with the Asian Pacific region at 32% and in Latin America 28,5% (KPMG 1999). In terms of total taxation, the share of CTs in OECD countries has remained at approximately 8% over two decades. The largest source of revenue, namely PITs, shrank from 31% in the early 1980s to 27% in 1999 (see ch 4). The share of corporate profits in GDP of the OECD area strongly increased after the mid-1980s – hence the decline in the effective tax burdens on profits. This trend partly reflects an increasing erosion of the tax base as a consequence of widespread tax planning (eg the use of tax havens) and intense tax competition among industrialised countries and an overall convergence of rates.

**Table 6.4: Comparative composition of tax revenue as a percentage of GDP**

	1985-90								1995-98							
	Income taxes			Commodity taxes				Social Security	Income taxes			Commodity taxes				Social Security
	Total	Corpo-rate	Personal	Total	General	Excises	Trade		Total	Corpo-rate	Personal	Total	General	Excises	Trade	
<b>OECD regions</b>	14,2	2,5	11,7	9,5	4,9	4,0	0,7	8,1	14,6	2,9	11,7	10,0	5,6	4,1	0,3	8,7
NAFTA	13,9	2,3	11,6	7,7	3,4	3,7	0,6	4,6	15,0	2,9	12,1	7,5	3,7	3,5	0,3	5,2
EU	14,4	2,7	11,7	11,3	6,4	4,2	0,7	11,5	14,2	2,9	11,3	12,4	7,5	4,6	0,3	12,2
<b>Developing regions</b>	5,0	2,4	2,1	11,2	2,9	2,7	4,7	1,4	5,3	2,4	2,5	11,1	4,3	2,3	3,9	1,5
SADC	6,3	2,9	3,1	11,7	3,2	2,3	5,7	0,4	6,9	2,4	3,9	11,6	3,8	2,3	5,1	0,5
MERCOSUR	3,7	1,8	1,0	10,6	2,6	3,0	3,7	2,4	3,7	2,3	1,0	10,6	4,8	2,3	2,6	2,5

**Memorandum items**

	Income/commodity taxes		Corporate/personal income taxes	
	1985-90 (%)	1995-99	1985-90	1995-98
<b>OECD regions</b>	1,6	1,6	0,2	0,3
NAFTA	1,8	2,0	0,2	0,3
EU	1,3	1,1	0,2	0,3
<b>Developing regions</b>	0,5	0,5	1,4	1,5
SADC	0,5	0,6	0,9	0,6
MERCOSUR	0,4	0,4	1,8	2,3

Sources: OECD (2000a); IMF (2000b).



It can be argued from the above analysis that differences in terms taxation between developing and developed regions have evolved over time because of the differences in the *process of development in these countries*. A natural shift has occurred in the importance of different taxes in developed countries, from CTs to PITs, according to the levels of development. Developed countries therefore had the opportunity to utilise CTs to their optimum as a source of revenue. In developing countries, however, this shift has not taken place naturally. Whilst still underdeveloped, the process of globalisation has pressurised developing countries to become more competitive and to offer artificial tax breaks in terms of their largest source of revenue, that is CTs. Stotsky and WoldeMariam (1997:43) argue that significant determinants of tax revenue shares in sub-Saharan African countries are the share of agriculture in GDP and of mining in GDP. Although CTs are therefore still important, especially in terms of the SADC region, tax competition is also becoming a factor in these countries. The shift that occurred in developed regions will therefore also have to take place in these countries but within a shorter period of time. Once again, the inequity of income in these countries becomes a problem, and if their PITs are not competitive enough, they will be forced to find other sources of revenue, such as commodity taxes. However, this option remains unviable as long as most of the population remains poor. Fiscal adjustment goes hand in hand with the tax composition in the various countries under consideration. As repeatedly pointed out in previous chapters, tax harmonisation may eliminate international misallocation due to rate differentials, but may also cause distortions within one or all countries that could outweigh the international efficiency gain of harmonisation. Taxes should therefore be harmonised around an efficient system with a small excess burden that ensures neutrality (sec 2.3). An efficient tax system, however, is not the same for all countries.

The developmental status, as pointed out in chapter 3, plays a decisive role here. This is also because different countries have different public expenditure needs and different instruments to finance them. Developed countries may, for instance, be more concerned with equity and neutrality, whereas developing countries might be more concerned with tax revenues and capital flows (Faria 1995). Governments of developed countries normally spend more, 31,5% against 25,5% of GDP in developing countries and mostly on social security benefits and health, while developing countries spend mainly on economic services, general public services, defence and education (see fig 6.2).

### 6.4.1 Government expenditure

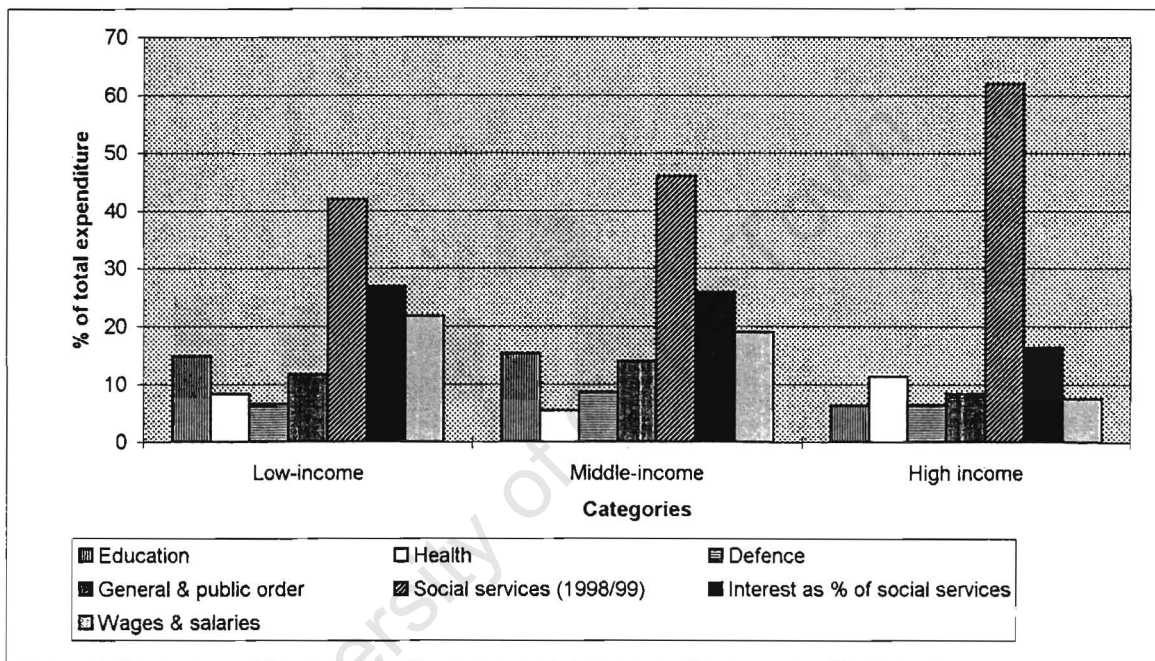
International cross-section evidence suggests that the composition of government expenditure grows as the per capita income rises and government expenditure at different levels can therefore be summarised as follows (Van der Berg 1991):

- (1) In low-income countries, the bulk of government expenditure is typically directed towards capital investment in the infrastructure, stimulation of industrial development through export subsidies and other incentives, and the establishment of primary education and health care systems. At present, most of the SADC countries, notably Angola, the DRC, Lesotho, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe fall into this category. China and India as the largest federations in the world with populations of 1,26 billion and 1,03 billion respectively, also falls into this category.
- (2) Middle-income countries give priority to education, health care and research and development, and also usually begin to develop a social security system. At present, lower middle-income countries that fall into this category and that are part of the SADC are Namibia, South Africa and Swaziland. Botswana, Mauritius and Seychelles fall into the higher-middle-income category with Latin American federation such as Argentina and Brazil also in this category.
- (3) High-income countries are characterised by huge increases in the share of transfer payments (especially social security-related ones), which are typically compensated for by reduced public investment. Some of these countries, such as Australia, Canada, Switzerland, the US and EU members were discussed in the previous chapter.

The expenditure in developing countries may be quite ineffective and inefficient in infrastructure delivery because of problems such as corruption. Large governments (eg Sweden) can, however, be efficient, where higher levels of taxation are justified (ch 4). The available taxes for raising revenues, direct against indirect, may also differ (Burgess & Stern 1992; Faria 1995; Black, Calitz & Steenekamp 1999). Figure 6.2 shows that expenditure increases with development – hence the view that taxation increases with the process of development. As discussed earlier and indicated in table 6.4, the bulk of revenues of developing countries come from income taxes, mainly CTs (6% of GDP and 38% of total revenue); taxes on goods and services (5% of GDP and 25,5% from VAT and GST of total revenue); and international trade taxes, involving mainly

import duties (5% of GDP and 10,7% of total revenue). Import duties will, however, disappear in future in compliance with WTO regulations. By contrast, the structure of revenues for developed countries is 31% from income taxes, mainly on individuals (ie 24%), 19% from VAT or GST and 33% from social security contributions (see also ch 4). Again, tax reform in developing countries is therefore increasingly being shaped by what is happening in developed countries because of international linkages and globalisation, although many differences are still evident.

**Figure 6.2: An international comparison of government expenditure, 1998/99**



Source: World Bank (2001)

Although it is generally accepted that it is easier to levy CTs and trade taxes because of a few important corporations or points of importation and exportation, the overall tax structure in many sub-Sahara African countries is still weak. Apart from general economic and political weaknesses, the tax structure in many of these countries has impaired the efficiency of resource allocation in the economy and incentives for growth, and has limited the ability to raise tax revenues. These weaknesses are apparent in all areas of the tax system. International trade taxes are typically characterised by an excessive number of nominal tariff rates, high rates, and numerous exemptions, resulting in significant dispersion in the rate of effective protection. Customs structures protect industries, leading to lower incentives to produce efficiently and

limiting economic growth. Export taxes and misvalued or multiple exchange rates also distort domestic incentives for production. Marketing boards that pay farmers below-market prices for crops may impose significant implicit taxes, which are not recorded as tax revenue.

Domestic taxes are also poorly structured in many sub-Saharan African countries. Indirect taxes such as VAT or other broad-based sales taxes, often have multiple rates, apply to only a limited number of sectors and have extensive exemptions – both within and outside the tax law – leading to cascading and distortion in economic incentives. Corporate income taxes are often limited to the formal sector and characterised by high marginal tax rates and narrow tax bases because of extensive tax incentives and tax discrimination against local corporations (ch 5). The main differences between developed and developing countries include the constraints facing governments such as the weakness of administration, limited experience in taxation, poor accounting, a low level of monetisation in the economy, the high share of agriculture and tax handles<sup>117</sup> which are generally few in comparison with developed countries (Burgess & Stern 1992:84). Structural and institutional factors, a more skewed income distribution in developing countries and taxpayers and tax authorities who cannot deal with complex tax laws, are related differences.

## 6.5 MACROECONOMIC STABILITY IN THE SADC

From the discussion of economic disparities in the SADC discussed in chapter 5 (see table 5.2), one may conclude that the SADC is not yet ready for further integration, especially monetary unification. The need to set a uniform convergence procedure or accession criteria (linked to price stability, deficit/debt standards, exchange rate and monetary mechanism and long-term interest rates) for macroeconomic stability to improve economic growth, has therefore already been recognised. As is the case prior to the EMU and the Excessive Deficit Procedure under the EMU laid out in the Maastricht Treaty and budget directives (see appendix D), these convergence criteria are globally recognised. Monetary policy is best entrusted to an independent central bank with a mandate for price stability and/or inflation targeting. Its political feasibility may, however, improve under decentralised fiscal systems (see Shah 1999). The convergence procedures can therefore be seen as a contract with external enforcement, although

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<sup>117</sup> A tax handle represents any means by which governments are able to raise more revenue (eg VAT which is also known as a money-making machine).

voluntary compliance is applicable.

Punishment for noncompliance could be in the form of penalties; alternatively awareness should be created amongst players that if they do not comply, their economies will be severely hurt. However, convergence criteria such as those set by the EU (appendix D.1) may create incentives for members to reach targets and in so doing improve their economic performances (see also Jenkins & Thomas 1997; Hallerberg & Von Hagen 1998; Flint 2000). This has been the case in other regional groupings such as MERCOSUR (De Mello 1999) as well as ECOWAS. The importance of strong leadership should be recognised, and in this regard, it is advisable for the SADC to utilise South Africa's experience and resources to its advantage and not ignore it as a dominant power. In order to formulate some criteria for the SADC, it is thus important to evaluate to what extent the SADC has succeeded in reaching the criteria set by, say, the EU and ECOWAS, which are representative of Africa but also similar to those set by the EU. The convergence criteria set by ECOWAS are as follows:

Primary criteria:

- (1) ratio of budget deficit (excluding grants/GDP [commitments base] less than or equal to 4% by the year 2002)
- (2) inflation rate of 5% by 2003
- (3) central bank financing of budget deficit 10% of previous year's tax revenue, and compliance by member states by 2003
- (4) gross revenues that are greater than or equal to six months of imports

Secondary criteria:

- (1) prohibition of new domestic arrears and liquidation of all existing arrears
- (2) the tax revenue/GDP ratio equal to or more than 20%
- (3) wage bill/total tax revenue equal to or less than 35%
- (4) the public investment/tax revenue ratio equal to or more than 20%
- (5) the maintenance of real exchange rate stability by each member, although the exact rate will be determined in the context of the establishment of the ECOWAS exchange rate mechanism
- (6) the maintenance of positive real interest rates by members

In the following sections, the SADC will be evaluated in terms of its macroeconomic indicators

presented in table 6.5 as well as tax statistics collected and discussed in this and the previous chapter. This evaluation will be done in accordance with criteria set by the EU and ECOWAS, in order to design appropriate criteria for fiscal policy, and more specifically, tax criteria for a future SADC. The evaluation will, however, differ from conventional ones in the sense that tax competition and its implications for macroeconomic stability in the region will be taken into account.

**Table 6.5: Macroeconomic indicators for selected developing and developed regions**

COUNTRIES	AV ANNUAL GDP GROWTH RATE, 1990-99 (2002-06)	CPI INFLATION RATE, 2000 (2002)	CENTRAL GOVERNMENT BUDGET BALANCE, % OF GDP, 1998 (2002-06)	CENTRAL GOVERNMENT DEBT, % OF GDP, 1998 (2000)
<b>DEVELOPING</b>				
Argentina	3,2	-0,5	-1,5	56 (60)
Brazil	2,9	6,0	-5,8 (1990)	45 (50)
India	6,1	4,7	-5,2	---
South Africa	1,9	5,5	-2,6 (-1,8; 2002)	51 (47)
SADC average	3,6 (1994-2000)	62 (1999-2001)	-3,5 (2000)	102 (2000)
<b>DEVELOPED</b>				
Australia	4,1 (3,7)	4,5 (2,4)	1,9 (1)	16,8
Canada	2,3 (2,8)	2,7 (2,1)	2,2 (1,9)	116,2 (104,9)
Switzerland	0,5 (1,8)	1,6 (1,8)	---	---
US	3,4 (3,6)	3,4 (4,6)	1 (2,7)	68,3 (58,8)
Germany	1,5 (1,8)	1,9 (1,6)	-1,4 (-1,2)	63 (59,7)
EU average	(2,3)	2,3 (2,1)	(0,1)	(59)

**Source:** OECD Projections (2000); The Economist (2002); World Bank (2001)

As pointed out in chapter 5, SADC member countries are unlikely to benefit significantly from increased access to neighbouring economies while governments drain resources (crowding-out) from the private sector. A whole range of goals conducive to SADC growth should therefore rather be set: (1) the creation of macroeconomic stability; (2) the establishment of political stability and improved governance; (3) the creation of institutions which ensure policy irreversibility and a regulatory environment that limits private sector excesses; (4) the

encouragement of private-sector enterprise; and (5) the development of human capital through investment in education and health. These policies could also improve the environment for private sector investment which is crucial to the creation of formal employment. The following question can therefore be posed: Are these goals achievable? Table 6.5 gives an overview of a few macroeconomic indicators, which are important in terms of taxation and therefore also fiscal policy, for all developing and developed regions discussed in this study. A separate investigation of these goals and hence the different macroeconomic indicators is important to find convergence criteria uniquely designed for the SADC. To reiterate, the role of structural reform through deeper economic integration has become essential, and integration as a cooperation device rather than the expansion of trade or regional convergence should be emphasised.

### **6.5.1 Economic growth and inflation**

Although the annual average growth performance of the SADC members picked up significantly during the 1990s, the inflation rate estimated at an average of 62% for 1999 to 2001 is still a pressing problem that is extreme in comparison with any of the other developing and developed regions. Additional factors that merit consideration are the high debt burden and (the urgency of) taking advantage of the renewed growth performance if the social costs of further price and debt increases are not to be pushed up even further than the social benefits associated with growth.

Although the question of economic growth has not been optimally explored, it is considered to be the best in years. This is especially true when the average GDP per capita, which is equal to \$1 617 per annum is taken into account, which also explains the huge inequities that still exist in Southern Africa. However, these countries, like the EU, do not have 40 years to achieve their goals. The expansion of growth which goes hand in hand with development, is urgent in order to reduce poverty and alleviate unemployment in these regions. A well-designed tax system should therefore facilitate growth in developing countries, and should include the following: (1) little or no taxation on profits, in order to avoid discouraging entrepreneurship and risk taking; (2) little or no taxation of undistributed profits in view of possible underdeveloped capital markets; (3) taxes aimed at discouraging consumption, especially luxury consumption, relative to savings; (4) little or no taxation of the poorest people, who need an adequate level of consumption to enable them to be productive; (5) taxes that are stable and certain; and (6) taxes that are well

administered, especially in the nonmonetised sector in order to encourage its incorporation into the monetary economy (Bird 1992:47). Some of these issues were already discussed in the previous chapter and although some of these goals, especially (1) and (2) may be overly optimistic, they relate directly to the study at hand. In order to find a fiscal and therefore suitable tax policy for the SADC, it is vital to once again summarise all the tax features relevant to growth and to examine the implications of tax competition in this regard.

The SADC could also learn from the experience of developed economies. The EU, for instance, has recognised that the economic disparities in the Union create a need to promote convergence in income levels and living standards. This would require poorer member states to grow faster than the average for the Union (appendices D.2 and D.3). Improving growth performance is therefore a common goal in integration exercises in the developing and developed world. For developing countries, however, the aim of integration has always been growth through industrialisation (redistribution), that is structural change in all participating members, whereas convergence in developed countries is more concerned with relative growth performance, that is, for the poorer countries to grow more rapidly than the richer ones (ie redistribution through growth) (McCarthy 1999:379).

It is realistic to assume that developing countries, and more specifically the SADC members will, with increased development, attach greater importance to individual income taxes and also commodity taxes such as VAT. Experience has shown that capital becomes much more mobile with development. The burden on PITs and VAT in the last instance then becomes the compensating sources of revenue. In order to keep, the wealthier individual in particular, from avoiding or evading a heavier tax burden it is imperative to make marginal income tax rates more competitive in comparison with other countries. Marginal income tax rates in the SADC are already high in comparison with international standards and increases in these rates could harm savings and investment ratios.

The average share of capital income taxes already carries a significant weight (31,3%) in the SADC and leaves some room for adjustment when compared with the EU average (41,6%) as well as subnational shares in Argentina, Brazil and India. This is the case because the CT burden is being kept artificially low through tax incentives with high PIT burdens. The worldwide



tendency is also in line with keeping the corporate tax burden as low as possible in order to attract more active or fixed capital and even zero-rate some withholding taxes on foreign interest income (see table 4.2). The belief is that capital income taxes, especially those on interest income, are “disappearing” because the implementation of the residence principle on interest income has become ultra burdensome with cooperation between governments not always forthcoming. This applies even more so to SADC members because a significant part of these countries, with the exception of South Africa and Mauritius, do not have the necessary double taxation agreements that necessitate the exchange of information.

The need for the negotiation of DTAs accompanied by tax sparing arrangements has to be re-emphasised. These member governments therefore realise the need to attract capital which is evident from the numerous tax incentives provided in terms of export processing zones (EPZ) and foreign investors (table 6.1). The effective tax burden in the SADC therefore requires adjustment, and whilst CT revenues are still considered the most important source of revenue, capital income tax revenues could also be increased significantly through the coordination of tax incentives (if applied at all). This is possible because, as already observed, these incentives have attracted an ignorant share of world investment to Southern Africa. The harmonisation of rates to lower ones will then in future also be possible without losing any revenues. A disconcerting feature relates to the fact that in some SADC countries, notably South Africa and Zimbabwe, the shift from CTs to PITs has only taken place because of an overall reliance on corporate taxes to individual taxes. With labour becoming more mobile, especially skilled labour from developing countries (World Bank 2000) and general consumption taxes becoming the fastest growing revenue sources worldwide, it is almost a sure thing that individual income taxes as a revenue source will also decline in importance in the future. To reiterate, the tax base, that is the poor, will not be able to carry the extra burden.

Assuming that the SADC governments have already decided on the relevant balances between capital income and commodity taxation, the average share of sales taxes and excise taxes in the SADC is still relatively low (fig 5.2) in comparison with the EU average (fig 4.2) and also the subnational governments' share of the federations discussed in this and the previous chapter. Although India's subnational share seems high, the central government still tends to undermine these authorities' rights and to exercise too much control over these resources (see appendix E).

The subnational share of these taxes for India is also much higher than in mature federations such as Canada and the US (see fig 4.2).

In terms of commodity taxes, SADC members have already started adjusting their tax systems, most of them changing over to VAT systems. In this case it has to be emphasised that a country should not switch over to a VAT system simply to please the rest of the community. A destination-based VAT system with competitive rates and/or a national clearing mechanism could provide the necessary answer. The EU example can serve the SADC region well in the sense that its success has been proven. For the SADC, a central revenue authority (possibly referred to as the "CRA") with assistance from, say, successful member authorities such as SARS is a definite prerequisite. A well-developed administrative device or advice network should therefore be in place but also utilised optimally by members. A country with a VAT that is deemed to be too high could accede to the provisions of a harmonisation process by lowering its VAT and raising other domestic taxes with no impact on its own citizens and those of other regions. A VAT can therefore also be a useful tool in comparing competitiveness between countries (see Razin & Slemrod 1990). Keeping all tax rates competitive, while raising the necessary revenue, is therefore essential. All of the points discussed in terms of taxation can therefore be growth-enhancing.

To establish a high degree of price stability according to the EU convergence criteria (observed from the preceding 12-month period), price stability should not be more than 1,5 percentage points above that of (at most) the performance of the three best members. When observing table 5.1, which spans a seven-year period, Mozambique, Seychelles and South Africa were the best performers. One can immediately see that the majority of the members fall outside the range of 1,5% and that either a revision of the criteria for the region or some kind of intervention is necessary. Even in terms of the ECOWAS criteria, where the inflation rate is less flexible and is set at 5% by the year 2003, a significant number of the members still fall outside the objective. In terms of inflation, it is therefore suggested that the utilisation of automatic stabilisers instead of discretionary fiscal policy should be sufficient enough to recover economic balance or equilibrium. In this regard, enough theoretical proof exists to support the view that monetary policy should rather be used as stabilisation instrument and that fiscal policy should be left to its main countercyclical impact (Wren-Lewis 2000).

### 6.5.2 Government deficit and debt

With higher tax revenue returns, higher amounts could be made available for public spending in terms of infrastructure and/or social services such as education and health. On the other hand, fiscal deficits could be reduced or government savings could be expanded. When both the government deficit and debt as ratios of the GDP, -3,5% and 102% respectively, are compared to the ratios of other countries, it is clear that there is definite scope for further fiscal consolidation in the SADC. The EU criteria suggest a government deficit of no more than 3% (including grants) of the GDP and government debt no more than 60% of the GDP under normal circumstances. The ECOWAS criterion is 4% (excluding grants) by 2002. Concerning both the EU and ECOWAS criteria for deficits, the SADC is much more in line with these targets and this also seems to be realistic for future utilisation. The debt situation could, however, become problematic if it is not kept within certain limits. It is not necessarily the level of debt that could be problematic but the servicing of this debt which could get out of hand. A large number of developed countries have much larger debt burdens than those in the SADC, but these countries are still a position to service their debt. Argentina is a classic example of a developing country that defaulted on its debt in 2001. The expectation is that unless the government is able to restructure and agree on new revenue arrangements with its provinces, the benefits of the IMF loans will be short-lived, triggering a full-blown emerging-market crisis (The Economist 2002).

One should bear in mind that most SADC countries, like Argentina and Brazil, are highly indebted, with others moderately and less indebted. It is important for these countries' governments to reduce dissaving. The golden rule should therefore be to utilise government debt only for the financing of capital expenditures (ie public investment projects). Any other government expenditure (ie current expenditure) should be financed from taxes.

### 6.5.3 Macroeconomic convergence criteria for the SADC

The largest countries in terms of population size (the DRC, South Africa and Tanzania) are expected to be net contributors to a future SADC budget, and also have most of the voting rights (economic union). As such, they, like EU members such as France, Germany and the UK, carry most of the weight in terms of economic and political issues. As earlier mentioned, however, most of the economies in the SADC (the DRC included) are highly indebted (table 5.1) and

convergence criteria could motivate these governments to find solutions to various types of problems. The SADC treaty provides for an ultimate harmonisation of political and socioeconomic policies, and in this regard, an internal CM is best preserved by constitutional guarantees (Shah 1995). The SADC, transforming into a CM, would therefore have to decide on the degree of tax diversity (tax competition) preserving tax sovereignty for its members such as the Maastricht Treaty in the EU, or tax neutrality that entails a higher degree of coordination such as the Single European Act in the EU. Economic disparities that persist within the SADC could, however, involve “compensation” in the form of higher social spending for less prosperous countries. It is therefore essential to formulate criteria to which the SADC members can comply, and which are uniquely designed for this region. The following criteria have therefore been designed to include important macroeconomic variables in respect of fiscal and thus tax policy, but are a well-balanced mixture of the suggested criteria for the EU and ECOWAS:

Primary criteria:

- (1) A long-term economic growth rate of at least 1 percentage point above the three best performing members should be pursued under natural conditions and at all times.
- (2) The achievement of a long-term price stability and therefore inflation targeting is left mainly in the hands of a central monetary authority (possibly known as the CMA). Fiscal and tax policy should support this and a maximum band of 2,0 percentage points above the inflation or CPI rate of the three best-performing members (observed over the previous 18-month period) should be allowed.
- (3) A government deficit no larger than 4% (including grants) and a government debt not exceeding 70% should be allowed.

Secondary criteria:

- (1) The total tax revenue/GDP ratio should be equal to or more than 20%.
- (2) Corporate tax/total tax revenue should be equal to or more than 35% and corporate tax rates should not exceed a level of 35% to remain internationally competitive.
- (3) Tax incentives should be kept at an absolute minimum, and if granted, they should be better coordinated to ensure that effective tax rates do not decrease to the least common denominator.
- (4) A well-administered and well-designed VAT system that is sufficiently competitive and raising enough revenue should be in place.
- (5) Interest on debt/social services should be kept at a level not exceeding 20% of total

government expenditure (see fig 6.2).

- (6) Wages and salaries/total government expenditure should be kept at a level not exceeding 10%.
- (7) Government dissaving should be kept at a minimum in line with those levels in developed countries to also ensure a higher rate of public investment.

Obviously the above-mentioned criteria should be seen merely as guidelines because they do not include all the macroeconomic variables that could be utilised, for example, exchange rates and interest rates. Only the applicable ones in terms of fiscal policy were included.

## 6.6 UNRESOLVED ISSUES INCLUDING INSTITUTIONAL DESIGN

In the following section, unresolved issues which could affect the convergence criteria but that could also turn tax competition into a dilemma are discussed in more detail. War-torn countries such as Angola and the DRC could have a profound effect on the success of the convergence criteria outlined. The DRC, which was one of the wealthiest countries in Africa because of its vast mineral wealth is being plundered by its neighbours – Burundi, Rwanda and Uganda (UN, 2001). By trading arms for Congo's natural resources, a number of corporations are involved in fuelling the conflict that involves five African countries: Angola, Namibia and Zimbabwe are backing Kinshasa's forces against a rebel onslaught aided by Rwanda and Uganda. The consequences of illegal exploitation of Congo's resources are twofold.

Firstly, huge sums of money have been made available to the Rwandan Patriotic Army (RPA) and the individual enrichment of top Ugandan military commanders and civilians has been observed. Secondly, the emergence of illegal networks headed either by top military officers and/or businesspeople, especially from Belgian corporations has been traced. The DRC was once a Belgian colony. These two elements seemingly form the basis of the link between the exploitation of natural resources and the ongoing war. It is further argued that the latest conflict in the Congo has become mainly about "access, control and trade of five key mineral resources". These resources are: coltan, diamonds, gold, cobalt and copper. The country's wealth is therefore attractive and hard to resist in terms of "lawlessness and the weakness of the central authority". Unfortunately, heads of state such as President Kagame (Rwanda) and President

Museveni (Uganda) are pinpointed in this lawlessness and are “on the verge of becoming the godfathers of the illegal exploitation of natural resources and the continuation of the conflict in Congo” (UN, 2001). Illegal cartels therefore thrive in this fragile and sensitive environment. In this instance, the valuable tax revenues of the DRC are actually “stolen” by neighbouring countries and could have snowballing effects for all parties involved.

As discussed in chapter 2, as long as the above cartels or the Mafia are not too “strong” and the demand is not too elastic, the government’s optimal tax rate and revenue in equilibrium are higher when the Mafia is present. This could also partly explain the relatively timid efforts of some governments with weak tax administrations (the DRC in this case) to fight organised crime. It has been shown that even if these cartels become “stronger”, the government’s optimal tax rate does not change and its revenue declines only to the extent that Mafia taxation reduces overall sales. The DRC government may therefore not be too eager to fight these illegal cartels, especially in the wake of receiving weapons. However, when these cartels become sufficiently strong (with heads of state of Rwanda and Uganda involved) and are able to raise their tax rate on above-ground transactions, competition between the government and Mafia for above-ground tax revenues becomes a zero-sum game. Here, the DRC government’s incentives to combat these cartels may become stronger, especially if the war could be halted effectively.

Another issue, that relates more to tax competition, should be kept in mind, namely the principle of taxation maintained in the member countries. Only four countries (Botswana, the DRC, South Africa and Tanzania) are on the residence principle. All of these countries, with the exception of Botswana, are also the largest in terms of population size. Although nonresidents are normally still taxed on their source income, strategies such as a zero percent tax (or withholding tax) on interest income of nonresidents, could lead to a higher degree of tax competition (noncooperation) between the other countries that are on a source principle of taxation. These countries could have a limited ability or be less willing to offer more tax incentives but could feel compelled to do so. The dominant strategy here would then compare well with the classical example of the “prisoner’s dilemma” (sec 2.4) where all of the countries defect, and all of them pursue beggar-thy-neighbour policies and collect lower tax revenues as a result. It is obvious that these countries cannot afford to lose more revenue, especially with tax bases too narrow in some instances (sec 5.4) and high government deficits in others (table 5.1). A limited amount of

tax competition could hold political advantages and force governments to become more efficient, that is a natural process of tax convergence with limited governmental growth. More sub-Saharan countries have, however, proven themselves to be corrupt with overspending becoming more frequently the order of the day. They have therefore failed to become more efficient (World Bank 2001). In the latter case, South Africa's future role could become even more important.

South Africa already seems to be playing an important role with the Tax Subcommittee on tax coordination situated at the NTSA (sec 6.2). South Africa's taxation authorities (SARS) and tax policies (NTSA) could become decisive for future tax planning in the region, including issues such as tax compliance. Although South Africa's tax policies are far from perfect, it has the advantage of a close working relationship with the BNLS countries within the SACU framework. All of these countries are implementing the destination principle in terms of VAT. The implementation of the residence principle in South Africa as well as in the DRC and Tanzania is, however, questionable and at this stage not recommendable for the BNLS countries and the rest of the SADC members which are on the source principle.

McCarthy (1999) argues that polarised development of South Africa through the SADC FTA does not necessarily mean that the less-developed SADC countries will therefore have to be compensated or that interventionist industrial policies will have to be designed for the region. All factors discussed in section 6.3.1.1 such as a struggling South African economy in terms of unemployment and poverty, lower wage costs and lower tariffs in the SADC against those in South Africa; and cross-border investments from South Africa into the SADC, can be seen as counterforces at work to reach a balance or convergence of some kind for all parties involved. Lower tariffs or lower tax rates in general may therefore lead to a higher degree of capital movement between the SADC countries and South Africa in particular, resembling Tiebout-type of competition.

Further measures or balancing forces may be needed to counter the aspects of tax competition that could become harmful, say, SADC member countries lowering tax rates to the least common denominator as an answer to the different tax packages offered. One may, however, expect tax burdens, especially in the short run, to become more expansive in commodity taxation (excises

and VAT), that is, the less mobile tax base. This is the exact opposite of the normal tax competition phenomenon in which tax rates are forced downwards. An upward convergence of commodity tax rates is therefore to be expected in the face of industrial development and revenue losses associated with the formation of the FTA/CU that still has to take effect in most SADC countries.

The South African economy is the exception, but with individuals and corporations becoming more mobile, commodity tax rates would have to finance reductions in income tax revenue. A downward convergence is therefore still to be expected in terms of capital income taxation in the region, because the attraction of direct capital will become more significant in future. It is here that the coordination of tax incentives will become vital in order to raise the necessary revenue. In these cases, South Africa as the dominant economy, could become the "Stackelberg" leader in the region, directing goods and services, labour and capital flows through its tax policy in the SADC. South Africa is already fulfilling a significant role in the SADC, and other SADC countries could take advantage of this in terms of tax advice and tax planning. Calitz (2000:10) argues that with fiscal policy increasingly becoming a function of international and regional cooperation, "the country with the stronger and healthier economy has an advantage in influencing the outcome of the process of cooperative decision-making".

The alternative measure to South Africa becoming the directive party in the SADC could be to form a core group comprising the strongest economies or the economies with the lowest external debt and/or highest per capita income. Whatever the outcome, the importance of cooperation as opposed to defection, has to be emphasised to avoid the process of integration becoming a debate over power sharing. In the most recent treaty signed in 2000 in the EU, the Treaty of Nice, it became a debate between France, Germany (also involving the rights of Germany's states) and the UK over voting rights (Von Kyaw 2001:33-37). The EU has been characterised by a general reluctance to deepen fiscal federalism leaving the Union with a small number of VAT revenues, no power to tax and to compensate those members because of intensified integration. The members' sovereignty has been more important and has dominated the tax scene. Although progress has been made in VAT harmonisation, little progress has been made in the area of capital income taxes (ch 4).



The EU experience cautions the SADC region that a more forceful approach to coordination could be needed both for commodity tax (excise duties and VAT) and capital income tax systems. This could entail SADC members sacrificing their sovereignty to a certain degree in order to provide a supranational authority with more power in terms of specifically fiscal policy. Although VAT rates may converge upwards with the possibility of a maximum rate needed in future, VAT systems will probably operate on a destination basis. This in itself could provide the region with tax neutrality and therefore prevent tax differentials in whatever direction. Regarding capital income tax systems, tax policy coordination is urgently needed. Globalisation will affect the region to a greater extent in the future, particularly as the region becomes more integrated and open to the rest of the world, factors of production become more mobile, and the emergence of financial innovation and information technology becomes more accessible. Tax competition will become a factor to be reckoned with and coordination will be essential in specific areas of taxation.

To summarise, these areas include a more comprehensive and targeted approach in terms of macroeconomic convergence; setting a maximum length for tax holidays, including the relative emphasis on withholding tax and corporate income tax incentives as well as the negotiation of tax-sparing agreements with major capital-exporting countries; limits to accelerated depreciation; the level and scope of application of investment credits and the negotiation of double taxation treaties especially between SADC members. In all of these decisions, SADC countries will have to select the right type of capital income tax system, ie classical or full integration [imputation], and the principle of taxation (ie residence or source principle). In this last instance, the normal recommendation is that developing countries should utilise a more integrated approach in terms of corporate and personal income taxes with the divergence between rates as small as possible.

In South Africa, the Katz Commission (1994:175-177) for example, investigated the STC option and concluded that "it has become desirable to consider better ways to achieve its objectives". It was argued that an imputation system could be implemented but that this complex system could only be considered once a restructured tax administration was functioning effectively. South Africa's switch to a residence principle of taxation is, however, questionable and not to be recommended at this stage for the rest of the SADC. Sinn (1987) argues that the combination of the source principle, immediate depreciation and the destination principle would lead to robust

neutrality in corporate taxation for developing countries. Although a source-based tax similar to that of a CBIT could represent the ideal solution, international taxation is based on net income. The double taxation of dividends and the effective exemption of interest income would be avoided because it would be taxed at corporate level (sec 3.4).

The design of future capital income tax systems in the SADC will therefore have to be cooperative, especially in terms of information sharing regarding most mobile sources of revenue (passive income). These systems will also have to make provision for tax discrimination between residents and nonresidents (differing withholding taxes) as well as debt and equity (thin capitalisation). In the long term, a minimum CT/PIT rate might even have to be considered. The outcome of tax competition on an international level with the possibility of a “World Tax Organisation” is, however, not a clear-cut arena and any further recommendations would be premature at this stage. Ultimately, four issues should also enjoy attention in the SADC concerning tax coordination, as identified in chapter 3:

- (1) adequate provision of public services (by foreclosing free riding and shirking)
- (2) fair interpersonal distribution of the tax burden as well as a fair intergovernmental distribution of tax bases
- (3) locational tax neutrality
- (4) permitting fiscal diversity

The adoption of a source-based capital income tax should provide the necessary fiscal diversity whilst a destination-based commodity tax will provide the necessary tax neutrality. Point (1), especially a fair interpersonal distribution of the tax burden, and (2) could become problematic if beggar-thy-neighbour policies are pursued via capital income tax measures such as the coordination of tax incentives.

As shown in section 5.2 and previous sections in this chapter, tax competition could become a reality to be reckoned with in a future SADC. The role of South Africa in this process has been recognised and although compensation for less developed economies in the region may not be needed, one economy alone would not be able to cover all inequities in the region. A few recommendations which are mostly more appealing at a national than a supranational level, can benefit a future SADC. Without these measures, which generally concern institutional design,

the convergence criteria exercise could prove to be a failure. The following recommendations are included:

- (1) The World Bank (2000) emphasises rules-based regimes in terms of trade, investment, and other policies including collaboration between local communities and government as seen in China, which could considerably reduce risks generally associated with a developing region. Fiscal rules accompanied by overarching or “gatekeeper” intergovernmental councils/committees provide a useful framework for fiscal discipline and fiscal policy coordination.
- (2) To ensure voluntary compliance, an appropriate institutional framework should be developed. Governance criteria such as those observed in the EU and other mature federations, namely transparency of budgetary processes and institutions and the accountability to electorates and general availability of comparative data on fiscal positions of all levels of government, should also be included. Governance criteria are often limited in federations in Latin America and Asia with detrimental effects (see appendix 4). Multiyear fiscal planning such as the Medium Term Expenditure Framework (MTEF) with detailed documentation, for instance, the Intergovernmental Fiscal Review and National Expenditure Survey of South Africa is a case in point. These measures, together with convergence criteria, can strengthen fiscal discipline not only in regional groupings but also in federations. A limited degree of tax competition within a broader framework of tax coordination could even enhance fiscal discipline. As countries become more decentralised, for instance South Africa, it could become more difficult to comply with deficit/debt standards, especially if subnational governments have substantial taxing and borrowing powers. The measures mentioned could, however, assist these countries to reduce common problems that might arise (sec 3.5).
- (3) Societal norms and consensus on the roles of various levels of government and limits to their authorities are vital for the success of decentralised decision making. In their absence, direct national or even supranational controls might not work and intergovernmental gaming leads to dysfunctional constitutions. Some kind of horizontal equalisation, as often seen in the more mature federations (sec 4.2), could therefore become important. This is particularly significant in respect of tax-sharing arrangements such as those present in Germany. These are often also suggested as a

solution for developing countries. Two types of solutions can be used in a future SADC to avoid a forced downward convergence of tax rates and prevent members from keeping their commitments in terms of expenditures. Firstly, throughout the years (from 1873 onwards) the German national government required the states to transfer increasing amounts of revenue to the centre (the upward-funding approach). The transfers affected all of the states in similar ways, and they had to increase revenues. If the SADC members are externally constrained by a supranational authority to raise a given amount of revenue, this could affect the “defection” level of tax collection within a prisoner’s dilemma scenario so that the “floor” level of supranational expenditures is relatively high. Secondly, in future, SADC members could transfer taxes on the most mobile factors to a supranational authority (ie the tax-sharing option). At present, the German national government collects all income taxes and then redistributes them back to the states. If the transfers are sufficiently large, states can maintain higher levels of social spending and only the ultimate source of the funds will change. Consequently most German states no longer compete with one another for mobile factors with differing income tax rates.

- (4) Intergovernmental transfers, if needed, in developing countries (eg Argentina, Brazil and India) tend to undermine fiscal discipline and accountability while building transfer dependencies which cause a slow economic strangulation of fiscally disadvantaged regions. However, intergovernmental transfers that are properly designed can enhance competition for the supply of public services, fiscal harmonisation, subnational accountability and regional equity (see sec 3.5). Substantial theoretical and empirical guidance on the design of these transfers should therefore be available (see sec 3.5).
- (5) A periodic review of jurisdictional assignments is essential to realign responsibilities with changing economic and political realities. With globalisation and localisation, the direct role of national governments and supranational governments in stabilisation and macroeconomic control is likely to diminish over time, but their role in coordination and oversight will increase as subnational governments assume enhanced roles in these areas. Constitutional and legal systems and institutions should be amenable to timely adjustments to adapt to changing circumstances (Shah 1999).
- (6) Governments at all levels must face the financial consequences of their decisions to ensure fiscal discipline. This is possible if the national government does not cover state

and local debt, and the central bank does not act as a lender of last resort to national governments.

As pointed out in section 2.2, tax competition can be regarded as efficiency enhancing only if Pareto efficiency is obtained. Pareto efficiency is possible only via decentralised market mechanisms. The welfare gains from tax competition are, however, not always that obvious and South Africa's continued tax reform efforts (including those of the SADC region) should therefore include definite coordination efforts as discussed in this chapter. In the light of wide ranging structural problems such as poverty and unemployment, the taxation of factors of production (especially the most mobile ones such as capital) should always involve a preservation of business in order to avoid a decrease in the productivity of employment of labour. Lower taxes can mean sub-optimal expenditures and hence the underprovision of services. Externalities or spillovers therefore entail costs and benefits and which should always be taken into account. Cross-border migration in the SADC could lead to an increased tax base as well as greater demand for public services and increased congestion, for instance, on roads and in parks. Excessive concentration stemming from urbanisation is already being experienced in metropolitan areas of South Africa, and tax competition could definitely exacerbate the situation if it is not monitored regularly. A more coordinated approach to taxation and therefore fiscal cooperation, in developing countries, is thus emphasised in this study.

## 6.7 CONCLUSION

The first section of chapter 6 investigated capital income taxation in more detail with specific reference to the SADC region. The second section extended the analysis into a realistic stream with specific emphasis on investment flows and patterns in Southern Africa. The last section concluded with a comprehensive overview of global taxation and key macroeconomic factors in order to find workable convergence criteria for the SADC region.

In this chapter it was concluded that Southern Africa needs a more coordinated approach in terms of taxation and therefore fiscal cooperation in especially developing countries is emphasized. An overarching supranational body, for example SARS or a newly created independent body, will therefore have to be established to enforce this cooperation between members. As discussed in

previous chapters, economic integration in Southern Africa is not necessarily for the purpose of the improvement of trade and development, but rather for the establishment of sound macroeconomic objectives in line with the process of tax competition.

Macroeconomic convergence criteria are designed with future utilisation as objective and the correct mix of taxes in terms of commodity and capital-income taxes are again emphasised. The reduction of tax incentives in the wake of the non-attraction of FDI in Africa, and the coherence and suitability of tax principles should therefore secure future government revenue. Quality rather than quantity incentives should rather be offered - otherwise Southern Africa may soon find itself in a predicament where capital-income or corporate taxes are “disappearing” as mentioned in chapter 2. With macroeconomic stability in the region, future investment ought to flow automatically to the region.

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## **CHAPTER 7**

### **CONCLUSIONS AND RESEARCH IMPLICATIONS**

#### **7.1 RESULTS**

In reaching the final stage of this study, it is not only the main theme itself but also various additional factors that should be taken into account. These remarks are therefore summaries but also draw various conclusions. In a theoretical context, the purpose of this study can therefore be explained as the evaluation of tax competition with special emphasis on commodity and capital-income taxes. Tax competition, however, forms part of a broader fiscal and therefore macroeconomic policy, and includes the welfare effects of one country's tax policy when goods and/or factors of production are traded internationally. It therefore entails government manipulating various tax instruments on the same or a horizontal level but also on different or vertical levels to adjust their tax rates or reconsider their tax systems (especially tax bases), in order to attract mobile factors of production from other regions, and/or to reach specific target variables. These targets or goals specifically include economic growth, price stability, public deficit and debt targets.

##### **7.1.2 Tax competition and coordination**

Uninterrupted tax competition does not always provide the preferred solution. This is the conclusive argument that has been propagated throughout this study with the emphasis on coordination and cooperation. A complex pattern of coordination is therefore required and highly dependent on the context in which it is pursued. Tax coordination may, for example, depend on the competitiveness of the market in question and the developmental status of the region involved. Tax harmonisation (including uniformity) therefore remains within the realms of a country's most preferred tax policy, followed within specific macroeconomic circumstances. The above arguments cannot be accepted without further investigation – hence the need for a clear understanding of both the theory and the practical circumstances involved. That is why three chapters, namely 4, 5 and 6, included an investigation of both tax competition and coordination in practice, as opposed to the theoretical discussions in chapters 2 and 3.

### 7.1.2.1 Industrialised regions such as the EU

The main aim of chapter 4 was to investigate the different tax practices, specifically tax competition and coordination regarding commodity taxation and capital income taxation in the EU and the five largest OECD federations, viz. Australia, Canada, Germany (an EU member), Switzerland and the US.

It was argued that a greater degree of power or discretion for supra-national authorities in the EU could solve various problems, such as information asymmetries and time lags in decisionmaking. This, however, appeared inconceivable with EU members “preserving” their fiscal sovereignty through the Maastricht Treaty. For instance, a higher degree of power may be needed in the case of VAT, especially if it transforms into the proposed origin-based VAT with national accounts clearing. This proposal also ties in with a broadening of the tax base, that is, VAT on consumption, as well as investment goods (which are currently excluded). Although the current destination-based (credit) VAT system is operating fairly smoothly, it is not without problems. It also seems unlikely that EU members will adopt the proposed origin-based VAT, while the issues of acceding members remain unresolved. The proposed origin-based system could further exacerbate problems, especially if the system is not correctly applied and rates are not harmonised. Tax competition has, however, been addressed through the setting of minimum rates in the EU.

It was suggested that tax coordination concerning capital income taxation in the EU could follow the VAT example, in which internal, as well as external neutrality (ie a restricted source principle) was suggested. Although an adoption of a source-based (gross) CBIT could essentially address double taxation of dividends and problems in the exemption of interest on debt, it is questionable whether this type of tax with tax credit provisions will be adopted unilaterally. A renegotiation of tax treaties (sec 3.4.1.7) would be needed, although the problem could also be adequately solved through an international tax association that could assist in information problems (residence principle) and thus serve the needs of both developing and developed countries. It was concluded that an integrated approach to tax competition and coordination within a fiscal framework could provide a viable solution. In future, the EU will therefore need a more active or discretionary role for supra-national authorities, as well as an



effective long-term allocative, redistribution and stabilisation tool of resources.

#### **7.1.2.2 Commodity and capital-income taxation**

Chapters 5 and 6 extended the analysis to different experiences of the developing world with the focus on Southern Africa. Issues concerning tax competition, especially regarding commodity and capital income taxes within the more “developed” federations, such as Brazil, Argentina and India, were therefore compared with the situation in the SADC. The degree of tax competition was discussed extensively within a futuristic framework. Because developing countries differ profoundly from developed countries, especially in a macroeconomic sense, it was essential to analyse the consequences of tax competition within this framework. Future issues such as fiscal allocation, redistribution and macroeconomic convergence and stability in Southern Africa in particular, were therefore also included in the discussion.

It was emphasised that the South African economy is an exception mainly because of its relative size within the SADC. However, this should be regarded as an advantage in the region. The South African economy has already made significant contributions in terms of exports and imports in the region, and one can therefore expect that although compensation for lost revenue in terms of tariffs might be needed in the shorter term, a range of benefits from an expansion of foreign trade over the longer term would make the SADC economies less dependent on South Africa. A continuous process of trade liberalisation exercised with caution could therefore be beneficial but strategies such as tax competition (including profit-shifting) would have to be taken into account especially from other regions such as Asia, which dominate trade in the developing world. This also includes effective commodity tax competition and/or coordination in a future SADC as pointed out in section 5.4.3. Issues emphasised in section 5.4.3 included the following: (1) although not always administratively feasible, the destination principle could secure most of the neutrality needed in a region that is in a process of trade liberalisation; (2) directly linked to (1), the adoption of a national accounts clearance mechanism operated by SARS or an agreed upon independent revenue authority would be advisable with further integration; (3) governments could consider adopting permissible tax rate “bands” for VATs or minimum rates; although (4) a degree of flexibility (applied with caution) could drive a “healthy”, export-oriented competitive process with automatic harmonisation.

The study concluded that a significant and sustained tightening was needed in terms of fiscal policy and that in most SADC countries the fiscal position was incompatible with either unilateral or regional trade liberalisation. Most SADC members would therefore have to take action to restore internal balance, although countries such as Botswana, Lesotho, Mauritius, Namibia, Swaziland and Seychelles were already showing signs that further trade liberalisation would be to their advantage. Despite the fact that countries such as Malawi, Mozambique, Zambia and Zimbabwe could lose in terms of revenue, broadened tax bases, improved tax compliance and rate increases of especially commodity taxes could significantly alleviate the problem. In addition, the need for convergence criteria in a future SADC region should be recognised, while creating incentives for members to reach targets and in so doing improve their economic performances. The importance of strong leadership was also recognised and in this regard it was advisable for the SADC to rather utilise South Africa's experience and resources to its advantage.

In terms of investment, and in this regard, capital income taxation, a few areas of importance were identified in chapter 6: (1) a more comprehensive and targeted approach in terms of macroeconomic convergence should be followed; (2) the setting of maximum lengths for tax holidays, emphasising withholding taxes and corporate income tax incentives, as well as the negotiation of tax-sparing agreements with major capital-exporting countries; (3) the setting of limits to accelerated depreciation; (4) the level and scope of the application of investment credits should be revised and double taxation treaties especially between SADC members in particular should be negotiated. The right type of capital income tax system, ie classical or full integration [imputation], and the principle of taxation (ie residence or source principle) should also be decided on by SADC members. In the last instance, the normal recommendation maintains that developing countries should utilise a more integrated approach in terms of corporate and personal income taxes with the divergence between rates as small as possible.

To summarise, the need for *structural reform* in Southern Africa has become more urgent than the advantages arising from a higher degree of regional integration in terms of both trade and investment. Macroeconomic convergence criteria should therefore be designed with future utilisation as an objective, and the correct mix of taxes in terms of commodity and capital income taxes is again emphasised. The reduction of tax incentives in the wake of the non-attraction of

FDIs in Africa, and the coherence and suitability of tax principles should thus secure future government revenue. Quality rather than quantity incentives should be offered - otherwise Southern Africa may soon find itself in a predicament where capital income or corporate taxes are “disappearing” as mentioned in chapter 2. With macroeconomic stability in place as a condition, future investment should flow to the region.

#### **7.1.2.3 Macroeconomic stability in Southern Africa**

The SADC economies are highly indebted and impoverished and convergence criteria could motivate these governments to find solutions to various types of problems. The SADC treaty provides for the ultimate harmonisation of political and socioeconomic policies, and in this regard, an internal CM could be best preserved by constitutional guarantees. The need for a supra-national authority and a more coordinated approach has already been recognised. The SADC, transforming into a CM, would therefore have to decide on the degree of tax diversity (tax competition) preserving tax sovereignty for its members such as the Maastricht Treaty in the EU, or tax neutrality which entails a higher degree of coordination such as the Single European Act in the EU. Economic disparities that persist within the SADC could, however, involve “compensation” in the form of higher social spending for less prosperous countries. It is therefore essential to formulate criteria with which the SADC members can comply and that are uniquely designed for this region. The following criteria are therefore formulated in an effort to include important macroeconomic variables in terms of fiscal and therefore tax policy as well as a well-balanced mix of the suggested criteria for the EU and ECOWAS:

Primary criteria:

- (1) A long-term economic growth rate of at least 1 percentage point above the three best performing members should be pursued under natural conditions and at all times.
- (2) The achievement of a long-term price stability and hence inflation targeting is left mainly in the hands of a central monetary authority (possibly known as the CMA). Fiscal and tax policy should support this and a maximum band of 2,0 percentage points above the inflation or CPI rate of the three best-performing members (observed over the previous 18-month period) should be allowed.
- (3) A government deficit no more than 4% (including grants) and a government debt of no more than 70% should be allowed.

Other considerations:

- (1) Total tax revenue/GDP ratio should be equal to or more than 20%.
- (2) Corporate tax/total tax revenue should be equal to or more than 35% and corporate tax rates should not exceed a level of 35% to remain internationally competitive.
- (3) Tax incentives should kept at an absolute minimum, and if granted, this should be in a more coordinated way to ensure that effective tax rates do not decrease to the least common denominator.
- (4) A well-administered and well-designed VAT system that is sufficiently competitive and raises enough revenue should be in place.
- (5) Interest on debt/social services should be kept at a level no higher than 20% of total government expenditure (see fig 6.2).
- (6) Wages and salaries/total government expenditure should be kept at a level no higher than 10%.
- (7) Government dissaving should be kept at a minimum in line with the levels in developed countries to also ensure a higher rate of public investment.

Obviously the above-mentioned criteria should be seen as a guide to in policy making and do not include all the macroeconomic variables that could be utilised, for example, exchange rates and interest rates. Only the applicable ones, in terms of fiscal policy, were included. Besides convergence criteria, a number of recommendations which are generally more appealing at a national than a supranational level, could also benefit a future SADC. These are as follows:

- (1) A rules-based regime in terms of trade, investment, and other policies including collaboration between local communities and government should be in place. This approach includes fiscal rules accompanied by *overarching* or “*gatekeeper*” intergovernmental councils/committees that could provide a useful framework for fiscal discipline and fiscal policy coordination.
- (2) An appropriate *institutional framework* must be developed to ensure voluntary compliance. Governance criteria, such as transparency of budgetary processes and institutions, accountability to electorates and general availability of comparative data on fiscal positions at all levels of government, should be included.
- (3) Societal *norms and consensus* on the roles of various levels of government and limits to their authority are vital for the success of decentralised decision making. These should

also prevent a forced downward convergence of tax rates and stop members from keeping their commitments in terms of expenditures.

- (4) *Intergovernmental transfers* should be properly designed to enhance competition for the supply of public services, fiscal harmonisation, subnational accountability and regional equity.
- (5) The periodic review of jurisdictional assignments is essential to realign responsibilities with changing economic and political realities. With globalisation and localisation, the direct role of national governments and supranational governments in stabilisation and macroeconomic control is likely to diminish over time, but their role in coordination and oversight will increase as subnational governments assume enhanced roles in these areas. Constitutional and legal systems and institutions must therefore be amenable to timely adjustments to adapt to changing circumstances.
- (6) Governments at all levels must face the financial consequences of their decisions to ensure fiscal discipline.

Tax competition has become a reality to be reckoned with in a future SADC and the role of South Africa in this process has been recognised. One economy alone, however, cannot cover all remaining inequities in the region. Without the above-mentioned measures, the convergence exercise may also fail.

To reiterate, the welfare gains from tax competition are not always that obvious and South Africa's continued tax reform efforts (including those of the SADC region) should therefore include definite coordination efforts. In the light of wide ranging structural problems such as poverty and unemployment, the taxation of factors of production (especially the most mobile ones such as capital) should always take business into account in order to avoid a decrease in the productivity of labour. Lower taxes may entail sub-optimal expenditures and hence the underprovision of services. Externalities or spillovers therefore involve costs and benefits and which should always be taken into account. Cross-border migration in the SADC could lead to an increased tax base as well as a higher demand for public services and increased congestion, on roads and in parks, for instance. The excessive concentration resulting from urbanisation is already being experienced in metropolitan areas in South Africa, and tax competition could exacerbate the situation if it is not regularly monitored. A more *coordinated approach* in terms

of taxation and therefore fiscal cooperation in developing countries especially is therefore again emphasised.

## **7.2 FURTHER RESEARCH OPPORTUNITIES**

A possible research topic, which flows naturally from this study, is the testing of behavioural responses to tax changes within the SADC. This could verify results relating to the importance of tax competition in Southern Africa and the need for a more coordinated approach in this region. This exercise would probably be econometric in nature. Work of this kind has already been initiated in the area of the South African situation within the Southern African Tax Institute (SATI) established at the Department of Economics, at the University of Pretoria, in which the author of this study will also be participating.

Various other directions could also be followed in the field of future research into tax competition. One of these could entail the utilisation of game theory techniques. However, these techniques have not yet been utilised to their fullest potential within the Southern African region. One way of solving this problem could be the establishment of research partnerships with overseas scholars. This exercise has been tested with great success at the University of Pretoria, with Prof Eckhard Janeba, a game theory and tax competition expert from Colombia University, who visited the Department of Economics in June 2001. Although various other research topics could flow from this study, the most important and urgent in Southern Africa have been briefly addressed. In future, an attempt will be made to define issues more narrowly and investigate in greater depth.

## APPENDIX A: REGIONS

**Table A.1: South-South Agreements**

<i>REGIONS</i>	<i>COUNTRIES/REGIONS INVOLVED</i>
<b>ASIA, MIDDLE EAST &amp; NORTH AFRICA</b>	
Association of South East Asian Nations (ASEAN)	Brunei, Indonesia, Laos, Myanmar, Malaysia, Philippines, Singapore, Thailand, Vietnam
The Gulf Cooperation Council (GCC)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates
<b>LATIN AMERICA</b>	
Central American Common Market (CACM)	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua
The Andean Pact	Bolivia, Ecuador, Peru, Venezuela
Latin American Integration Association (LAIA)	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela
Caribbean Community and Common Market (CARICOM)	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Monserrat, St Christopher-Nevis, St Lucia, St Vincent and Grenadines, Trinidad and Tobago
Association of Caribbean States (ACS)	37 Caribbean Basin and Central American States, CARICOM, Colombia, Mexico, Venezuela
Group of Three (G3)	Colombia, Mexico, Venezuela
Common Market of the South (MERCOSUR)	Argentina, Bolivia, Brazil, Chile, Paraguay, Uruguay
<b>AFRICA</b>	
Economic Community of the Great Lakes Countries (CEPGL)	Burundi, Rwanda, DRC
Economic Community of Central African States (ECCAS)	Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo
Mano River Union (MRU)	Guinea, Liberia, Sierra Leone
<b>SUB-SAHARAN AFRICA</b>	
Economic Community of Western African States (ECOWAS)	Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leon, Togo
French Western African agreements (UEMOA)	Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau,

	Mali, Mauritania, Niger, Senegal
French Central African agreements (CEMAC)	Cameroon, Central African Republic, Chad, Congo, Gabon, Equatorial Guinea
Common Market for Eastern and Southern Africa (COMESA)	Angola, Burundi, Comoro, Djibuti, Ethiopia, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Sudan, Swaziland, Uganda, Tanzania, Zambia, Zimbabwe
Southern African Development Community (SADC)	Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe,
Southern African Customs Union (SACU)	Botswana, Lesotho, Namibia, South Africa, Swaziland
Cross-border Initiative (CBI)	Burundi, Comoro, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe

**Table A.2: North-South Agreements**

<i>REGIONS</i>	<i>COUNTRIES/REGIONS INVOLVED</i>
<b>EU-REGIONAL INITIATIVES</b>	<b>EU</b>
Mediterranean Initiative	Egypt, Israel, Morocco, Lebanon, Jordan, Tunisia
EU-FTA with South Africa	South Africa
EU-FTA with MERCOSUR	MERCOSUR
EU Enlargement to include CEECs	Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia
Lome Convention	ACP countries that were former EU colonies
<b>US-REGIONAL INITIATIVES</b>	<b>US</b>
North American Free Trade Area (NAFTA)	Canada, Mexico
US-Israel Bilateral FTA	Israel
Free Trade Area of the Americas (FTAA)	Canada, all Latin American countries
Asian Pacific Economic Forum (APEC)	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand



## APPENDIX B: STATISTICAL TABLES

**Table B.1: Subnational shares of selected federations and the EU**

COUNTRY	SHARE OF TOTAL GOVERNMENT EXPENDITURE (%)		SHARE OF TAX REVENUE (%)	
	1990	1997-1999	1990	1997-1999
Australia <sup>1</sup>	50,4	49,7	20,7	25,1
Austria <sup>1</sup>	31,9	32,2	21,7	20,7
Belgium <sup>1</sup>	11,9	11,8	4,5	5,4
Canada <sup>1</sup>	58,7	49,4	49,5	43,5
Denmark	54,8	54,5	31,1	31,5
Finland	46,5	41,2	25,9	27,6
France	18,7	18,6	9,7	10,8
Germany <sup>1</sup>	40,2	37,8	28,9	28,8
Greece	---	7,9 (1994)	---	3,6 (1994)
Ireland	27,9	30,7	2,5	2,4
Italy	22,8	25,4	3,6	6,5
Luxembourg	19,9	16,9	6,8	6,3
The Netherlands	29,0	26,1	3,4	4,1
Portugal	8,7	11,6	3,6	5,9
Spain	34,3	35,0	13,3	13,8
Sweden	39,8	36,2	28,2	31,4
Switzerland	51,2	49,3	37,0	35,5
UK	29,0	27,0	5,9	3,6
US <sup>1</sup>	42,0	46,4	33,8	32,9
Note: 1. These countries represent federations whilst the rest are EU members (including Austria, Belgium & Germany).				

Source: IMF (2000b); World Bank (2000)

**Table B.2: Commodity tax revenue, 1998**

COUNTRY	COMMODITY TAXES AS % OF GDP		COMMODITY TAXES AS % OF TOTAL TAXATION		TOTAL TAXATION AS % OF GDP
	A <sup>1</sup>	B <sup>1</sup>	A	B	
Canada (provinces)	2,7	1,6	21,2	12,5	12,5
US (states)	1,9	0,9	33,3	16,0	5,6
Austria <sup>2</sup>	6,0	2,7	27,2	12,2	33,4
Belgium	1,3	3,2	8,1	19,8	33,2
Denmark	10,2	5,8	29,8	17,0	35,3
Finland	8,6	5,4	35,4	22,2	36,0
France	7,9	3,3	37,9	16,1	40,1
Germany	3,4	3,2	30,1	28,0	27,9
Greece	9,4	6,6	33,7	23,5	40,3
Ireland	7,0	5,2	24,8	18,3	33,0
Italy	5,6	4,1	21,1	15,4	39,3
Luxembourg	6,7	5,3	22,4	17,8	41,3
The Netherlands	7,0	3,5	28,7	14,5	43,4
Portugal	7,1	6,2	30,4	26,7	34,5
Spain	4,9	2,9	28,7	16,7	41,3
Sweden	7,0	4,4	29,7	18,8	33,4
UK	6,4	4,7	23,2	17,2	34,2
EU 15 average <sup>3</sup>	6,6	4,4	27,4	18,9	36,4
Notes: 1. Commodity taxation includes categories A and B, that is eneral taxes (including VAT) and taxes on specific goods and services (including excise taxes) respectively as defined by the OECD.					
2. Starting with Austria, the EU members' commodity taxation is shown at central or national level.					
3. Unweighted.					

Source: OECD (2000a)

**Table B.3: Capital income tax revenues, 1998/99**

<b>COUNTRY</b>	<b>INDIVIDUAL TAXES AS % OF GDP<sup>1</sup></b>	<b>CORPORATE TAXES AS % OF GDP</b>	<b>INDIVIDUAL TAXES AS % OF TOTAL TAXATION</b>	<b>CORPORATE TAXES AS % OF TOTAL TAXATION</b>
Canada (provinces)	5,3	1,3	42,0	10,0
Switzerland (cantons)	4,5	0,8	64,7	11,3
US (states)	1,8	0,4	31,0	7,9
Austria <sup>2</sup>	6,2	1,4	26,6	8,3
Belgium	8,0	1,8	43,5	17,0
Denmark	14,3	1,2	37,7	6,3
Finland	6,8	1,3	26,2	7,4
France	5,8	1,6	27,2	8,4
Germany	4,1	0,4	36,7	5,1
Greece	5,0	2,6	18,0	9,1
Ireland	10,6	3,2	37,1	11,4
Italy	10,8	4,0	34,7	6,5
Luxembourg	8,2	6,0	32,9	14,6
The Netherlands	7,6	4,1	31,2	17,0
Portugal	6,3	3,2	27,5	13,1
Spain	7,1	1,8	41,8	10,8
Sweden	4,2	0,7	8,5	12,4
UK	9,3	3,8	33,9	13,7
EU 15 average <sup>3</sup>	7,6	2,5	30,9	10,7
Notes: 1. Individual taxes (as defined by the OECD) are also included because EU members mostly use capital income or corporate tax systems that provide tax credits at the shareholder level. 2. Starting with Austria, the EU members' corporate taxation represents that at central or national level. 3. Unweighted.				

Source: OECD (2000c)

**Table B.4: Subnational shares of selected federations and the SADC**

<b>COUNTRY</b>	<b>SHARE OF TOTAL GOVERNMENT EXPENDITURE (%)</b>		<b>SHARE OF TOTAL GOVERNMENT REVENUES (%)</b>	
	<b>1990</b>	<b>1997</b>	<b>1990</b>	<b>1997</b>
Argentina	46,3	43,9	38,2	41,1
Brazil	35,3	36,5	30,9	31,3
India	51,1	53,3	33,8	36,1
Botswana	7,9	3,8	0,1	0,6
South Africa	20,7	49,8	5,5	5,3
Zimbabwe	13,5	---	3,4	---

Source: World Bank (2000)

University of Cape Town

Table B.5: The composition of tax revenues as percentage, 1998/99

COUNTRY	SALES TAXES (% OF TOTAL TAXES)	EXCISE TAXES (% OF TOTAL TAXES)	COMMODITY TAX (% OF TOTAL TAXES) <sup>2</sup>	CAPITAL INCOME TAX (% OF TOTAL TAXES) <sup>3</sup>	TAX REVENUE (% OF GDP)	TOTAL REVENUE (% OF GDP)
Argentina (federal)	27,5	13,8	42,7	41,7	12,6	13,8
Brazil (federal)	8,5	7,8	22,1	51,4	18,9	23,4
India (central)	0,1	25,7	27,1	23,6	9,2	12,3
Angola <sup>1</sup>	---	---	20,9	71,8	35,7	36,3
Botswana <sup>1</sup>	4,0	0	4,5	21,0	15,0	37,4
DRC	9,7	8,6	18,4	26,1	N/A	N/A
Lesotho	10,8	31,6	12,4	18,1	47,1	69,3
Malawi <sup>1</sup>	20,4	3,1	26,1	45,0	16,0	17,3
Mauritius	20,1	7,7	41,2	17,0	16,3	19,0
Mozambique <sup>1</sup>	N/A	N/A	50,9	14,1	16,7	18,3
Namibia <sup>1</sup>	18,8	9,1	32,0	26,4	31,5	36,1
Seychelles	N/A	N/A	6,6	20,0	46,4	31,6
South Africa	23,6	4,7	32,8	58,3	25,6	26,4
Swaziland <sup>1</sup>	13,4	N/A	14,4	27,2	33,1	34,7
Tanzania <sup>1</sup>	13,5	9,8	26,2	21,9	18,1	20,0
Zambia	30,4	15,6	46,5	33,4	31,5	34,2
Zimbabwe <sup>1</sup>	19,1	4,5	26,5	42,3	26,4	29,6
SADC average (unweighted)	14,6	10,1	25,7	31,3	27,6	31,6

Notes: 1. The statistics are only available for 1997 whilst the rest of the statistics are either for 1998 or 1999.  
2. Commodity or indirect tax excludes international trade taxes but includes fuel levies and/or property taxes.  
3. Capital income or direct taxes include social security contributions.

Source: Own estimates based on CREFA (1998); FISCO (1999); IMF (2000)

**Table B.6: Capital income tax revenues (%), 1999/00**

COUNTRY	INDIVIDUAL TAX (% OF TOTAL TAXES)	CORPORATE TAX (% OF TOTAL TAXES)	CAPITAL INCOME TAX (% OF TOTAL TAXES) <sup>2</sup>	TAX REVENUE (% OF GDP)	TOTAL REVENUE (% OF GDP)
Argentina (federal)	4,8	11,0	41,7	12,6 (8,3) <sup>3</sup>	13,8 (9,1) <sup>3</sup>
Brazil (federal)	1,3	6,2	51,4	18,9 (7,8) <sup>3</sup>	23,4 (10,0) <sup>3</sup>
India (central) <sup>1</sup>	10,8	12,4	23,6	9,2 (5,1) <sup>3</sup>	12,3 (6,1) <sup>3</sup>
Angola <sup>1</sup>	N/A	N/A	71,8	35,7	36,3
Botswana <sup>1</sup>	3,3	11,5	21,0	15,0	37,4
DRC	9,6	15,3	26,1	N/A	N/A
Lesotho	12,8	3,0	18,1	47,1	69,3
Malawi <sup>1</sup>	N/A	N/A	45,0	16,0	17,3
Mauritius	5,9	5,8	17,0	16,3	19,0
Mozambique <sup>1</sup>	N/A	N/A	14,1	16,7	18,3
Namibia	35,7	12,9	48,6	31,5	36,1
Seychelles	0	11,6	20,0	46,4	31,6
South Africa	42,2	13,3	54,5	25,6	26,4
Swaziland <sup>1</sup>	N/A	N/A	27,2	33,1	34,7
Tanzania	12,0	7,0	21,9	18,1	20,0
Zambia	21,9	8,9	33,4	31,5	34,2
Zimbabwe <sup>1</sup>	30,0	11,5	42,3	26,4	29,6
SADC average (unweighted)	17,3	10,1	31,3	27,6	31,6

Notes: 1. The statistics are only available for 1997 whilst the rest of the statistics are either for 1999 or 2000.  
2. Capital income or direct taxes include social security contributions and payroll taxes. In Brazil the social security contribution share to total revenue is much higher (35,3%) in comparison with the other federations. In the SADC, however, social security contributions are either nonexistent or relatively low.  
3. The figures in brackets represent the subnational share of the tax burden.

**Source:** Own estimates based on CREFSA (1998); FISCO (1999); IMF (2000) and SADC (2001)

## APPENDIX C: MAIN FISCAL CHARACTERISTICS OF SELECTED FEDERATIONS

### C.1 CANADA AND THE US

In terms of tax competition and coordination, Canada is probably the most interesting case study. The country is characterised by ethnic and regional diversities and has three levels of government, namely the federal government, 10 provinces, two territories and 4 507 municipalities. The provinces account for approximately 40% of total expenditure and local governments for 19% (table 4.1). The provinces have strong legal, fiscal, and functional powers, including a strong hold over local governments, although they are somewhat dependent on federal grants that represent approximately 4% of the GDP. These grants include a strong *equalisation* component which is the case in most “mature” federations these days. The three levels of government share the same tax bases which causes a number of problems in tax harmonisation and coordination, especially for income taxes and commodity taxes (VAT). Besides the overlapping taxes, a high degree of financial self-sufficiency is present at provincial level, and Canada also has one of the highest levels of horizontal tax coordination or harmonisation (Daly & Weiner 1993). As such, the Canadian example can be termed as “independence through cooperation” between the different levels of government.

Canada’s neighbouring country, the US, houses three levels of government, namely a federal government, 50 states and approximately 83 000 local governments (counties, cities, towns, school districts and other special districts). Canadian provinces enjoy a far stronger *de facto* influence on revenues and expenditure compared with the US, and also have a stronger influence over decision making at the federal level. Local administrations also have a fairly strong influence on provincial decision making in Canada. The fiscal federal system in the US provides substantial autonomy to subnational governments on both the tax and expenditure sides of the budget and relies heavily on these governments for revenue mobilisation and the provision of social and infrastructure services. The states have extensive authority over local governments and as such each state has the authority to decide on the powers and responsibilities it will give to its local government. The states in the US therefore have an informal and fragmented institutional role in federal government affairs and share functional authority. The federal government,

however, has acquired a dominant position by funding a large part of public activity, mostly welfare and public works, and in this sense, the US has also become much more centralised than Canada. Another difference is that while fiscal equalisation arrangements are implicit and piecemeal in the US, in Canada they are constitutionally mandated and of considerable importance.

During the 1980s and early 1990s, the federal government reduced the level of its explicit and implicit transfers to state and local governments in an attempt to increase the fiscal independence of these governments. Three effects were noticeable: the decline in the implicit subsidy that operated through federal income tax, the pattern of disparities and interstate competition, and the offsetting pattern from mandates and court cases on school finance. In the first instance, "General revenue sharing", formerly the only programme of general assistance to state and local governments, was eliminated. The 1986 federal tax reform eliminated the deductibility provision for state and local government GST against the liability of individuals for federal income tax, thereby ending the shifting of a substantial part of the burden of such taxes to the federal government. It also reduced the top marginal income tax rate to 33%, thereby decreasing the value of the remaining deductibility provision for income and property taxes. The Clinton Tax Reform of 1993 increased the top marginal tax rate to 39% thereby restoring some of the value to deductibility.

Itemised deductions are therefore again allowed in individuals' adjusted gross income (AGI). These deductions are, for instance, subtractions for specific expenditures cited in the law. The taxpayer has to list each item separately on the tax return and be able to prove (at least in principle) that the expenditures have been made and these deductions are passed out at high-income levels. This is also one of the main objections to local government deductions which are only passed out at high-income levels. A standard deduction can also be taken which is a fixed amount that requires no documentation, and taxpayers can choose whichever deduction minimises their tax liability. The net effect is still that a resident pays a higher price for each dollar's worth of public expenditures than before. In the second instance, the discussion falls on disparities and interstate competition. The US has always been characterised by wide fiscal disparities. There has been no major trend of lessening these disparities, although personal income disparities among the states are converging. Per capita expenditures vary from highs of



\$5 482 and \$5 064 in New York and Wyoming to lows of \$2 664 and \$2 440 in Missouri and Arkansas, a range of approximately 77% of the mean. The federal grant system is not systematically related to the level of personal income and does not equalise these fiscal disparities through, say, tax sharing such as in the case of Germany.

State and local governments are free to choose their own tax structures, as long as they do not violate the federal Constitution. Primary issues of concern relate to states not restricting interstate commerce and not discriminating against any subgroup of the population. States tend to rely heavily on income and sales taxation, although six states impose no income tax, and four impose no retail sales tax (RST), the preferred form of indirect tax in the US. Local governments tend to rely heavily on property tax, user charges and state government grants. The taxes that local governments may levy are prescribed, and although there is usually some freedom in choosing tax rates, the state usually provides for a maximum levy. Rules under which they may seek voter approval for fiscal action are carefully prescribed. The fiscal importance of these governments varies widely, from 40% of total state and local government spending in Vermont to 68% in Nevada. State and local governments raised approximately 32,9% of all tax revenue in 1997.

Federal government relies almost exclusively on income taxation, with almost two-thirds of tax revenue coming from the individual income tax. State and local governments do not directly share revenues and collections are made by a federal agency – the Internal Revenue Service (IRS). Various subnational governments have decided to adopt the same base as the federal income tax for their own individual and corporate taxes, and there is a system of information sharing between the IRS and the states' tax collection agencies. Tax rates, tax bases and user charges may be set by states without the approval of the federal government. They may borrow from whatever source they choose, subject to the limitations on general financial practices (eg disclosure) laid down by federal agencies. States have independent tax collection agencies and are only loosely tied to the federal government (information sharing). States may deliver expenditures in any manner they desire, except that the federal Constitution requires that they provide citizens with "equal protection". This principle has become an essential component in court disputes (*Bush v Gore*) regarding the recent national elections of 2000.

The only restrictions are those laid down by the states themselves through state constitutions to disallow deficit financing (in other words, states must balance their recurrent budgets every year). Borrowing is for capital financing purposes only. Federal government has laid down a number of mandates that restrict state and local government expenditure decisions: environmental and health regulations, conditionality on the receipt of federal grants, particular health and welfare services, and so on. In 1996, the Clinton administration enacted the Personal Responsibility and Work Opportunity Reconciliation Act. States now receive a fixed grant in advance from federal government. Where previously a state had to match federal dollars with its own with no fixed limitation on federal spending, welfare services would now have to be financed out of a fixed federal grant, supplemented by own funds. States could therefore run welfare as they saw fit, within broad limits. It is argued that competition among states could lead to a substantial reduction in benefits for the poor. Any state that enacts a generous welfare system could therefore be flooded with poor individuals from other states, forcing it to reduce its benefits, although welfare-induced migration is questionable (Levine & Zimmerman 1995). State governments have also mandated certain actions by their local governments.

In contrast to Canada and the US, Australia is regarded as the most centralised federation in terms of tax assignment, although most expenditure functions are devolved to the states.

## **C.2 AUSTRALIA**

Although there has been a tendency towards greater decentralisation in Australia, the vertical fiscal gap is still much larger between revenue and expenditure assignments at national and subnational levels than in Germany, for instance. The reason is that Germany implements tax sharing whereas Australia has grants (a form of revenue sharing). Australia houses three levels of government, the Commonwealth, eight states or territories, and approximately 900 local authorities. Although the Commonwealth accounts for approximately half of public expenditure, it raises around 67% of total revenue. Tax bases, however, are clearly separated among different levels. The fiscal gap at subnational level is filled by grants from the centre which represents 7% of GDP; half of them have an equalisation component. Local governments account for only approximately 6% of public expenditure.

Spahn (1997) argues that tax competition and harmonisation have not posed serious problems in Australia, mainly because of the limited role assigned to states as taxing authorities. This can also be attributed to the high degree of horizontal fiscal equalisation, which means that even states with relatively low taxable capacity (poorer states) do not need to have relatively heavy taxes because of the extensive use of grants. Although the Australian Constitution has originally reserved excise and customs duties for the Commonwealth, some of the taxing power has been devolved to the states in recent years. In 1996, the excise and customs duties collected entailed a 16,6% share of total tax revenue raised at the state level which was still much lower than that raised at subnational level by other federations (see table 4.2). Income and corporate taxes are available to the states in terms of surcharges, although this option has not been utilised. Lane (1983) argues that if the states eventually re-enter the field of personal income tax by way of surcharges, a high degree of harmonisation will be preserved. The High Court's interpretation of the general sales tax (GST) has also reserved this tax also for the Commonwealth. However, it is possible that the adoption of the new VAT system from 2000 could effect some changes, depending on the High Court's interpretation of this tax. If it is not implemented as an origin-based tax, a destination-based VAT could be interpreted as a tax on imports and invalidate it as a customs duty, as in the case of the previous GST. On the other hand, an origin-based VAT can be interpreted as an export tax and this could have detrimental effects in terms of competitiveness for industries. Either way, this reform will definitely broaden the tax base and probably reduce the country's high reliance on income taxes.

It has to be emphasised that historically not all of the federations were monetary unions. Germany and Switzerland had several currencies in the first half of the 19th century. Switzerland had several dozen different currencies and each canton or city coined its own. These coinages were withdrawn in 1851 at almost the same time as internal custom borders were eliminated and replaced by the new harmonised franc.

### **C.3 GERMANY AND SWITZERLAND**

Germany consists of a federal government, 16 states (*Länder*), and approximately 16 000 municipalities. Although the execution of public policies is highly decentralised, federal authorities set the policy guidelines and legislation. This has been labelled "the horizontal

approach to federalism” as opposed to the Anglo-Saxon vertical model of stricter division of responsibilities. Taking into account social security, more than 60% of public expenditure is spent at national level. The states have no power to change the tax bases or tax rates autonomously. They do, however, have a strong position in the tax law-making process, as the federal government (the *Bund*) cannot enact any changes in tax laws affecting their tax revenues or the administration without the consent of the majority of the *Bundesrat* - the second chamber of Parliament - an elected body representing the states. Via this chamber, the states can also introduce own proposals for tax legislation, which in turn require the consent of the *Bundestag* to be enacted. Most taxes are shared between the federal and the state level; the various tax sharing arrangements and federal grants have a significant equalization component. In summary, neither the national government nor the state governments have exclusive access to the main (or more flexible) tax instruments such as income tax, corporate tax and VAT. The national government receives a 42,5% share of all personal income taxes collected, the states retain another 42,5% share of income tax collected in their jurisdiction and all local governments share the remainder, namely 15%.

The states are exclusively entitled to revenues from the general wealth tax; estate, inheritance and gift taxes; transfer tax on real property; tax on beer; fire insurance tax; taxes on betting and gambling; and the tax on motor vehicles. In addition, the states have a 42,5% share in the revenue of the wage withholding tax, the personal income tax collected by assessment and the withholding tax on interest (excluding corporations). The states share half of the revenues from the corporate income tax and the withholding tax on dividends with the federal government. In 1995 the share of the states in the proceeds from VAT amounted to 44%. Finally, the states receive approximately 5% of the revenue from the local business tax or trade tax (*gewerbesteuer*).

In contrast to the states, the main local tax revenues come from the local business tax, personal income tax and the tax on immovable property. The local business tax consists of a tax on business profits and one on business capital. Local governments are entitled to set the tax rate on the local business tax by applying a multiplier to the statutory tax rates and the proceeds are shared with the federal government and applicable state. These shares are computed on the basis of a standard level of tax, thus removing the influence of the spread in multipliers. In exchange,

the local governments are entitled to a share of 15% of the revenue from the wage withholding tax and the personal income tax collected by way of assessment. The local government share in the withholding tax on interest is 12%. This change in fiscal relations was enacted in the 1970s to stabilise local tax receipts. Up to that time, the financing of communities often depended on the economic performance of few large locally based corporations. The share of local governments in proceeds from the business tax and the personal income tax is fixed in special legislation (not as a part of the annual budget process). It can only be changed with the consent of the states in the *Bundesrat*. The German Constitution does not provide for a direct involvement of communities in the legislative process, but the states are supposed to defend the interests of the local government level in the process. In 1998, the local business tax on capital was abolished. As compensation local governments are now entitled to a 2,2% share in revenues from VAT.

Switzerland is the other European federation included in this discussion. This country is the oldest federation with the confederation, 26 states (*cantons*), and approximately 3 000 municipalities, and probably has the most complex system of federalism. There are three separate layers of tax sovereignty, which have their origins in the development of Switzerland as a country. As far as local taxation is concerned (*cantons* and *communes*) there are 26 parallel sets of legislation that govern the taxes raised in each canton in a different manner. In principle, analysis of the tax autonomy of sub-sectors of the state would mean analysing the 26 sets of cantonal tax legislation and would require a disproportionate amount of investment in resources (OECD 1999). The federal government plays a leading role in most policy areas, and spends approximately 50% of public expenditure (including social security). As in Germany, the states and municipalities are generally responsible for the implementation of these policies. The Swiss federal system is sometimes referred to as a “cooperative federalism”. The system can thus be classified as direct democracy where referendums play an integral part in decision making by the different levels of government. There is an extensive network of grants, both from federal and state level, usually with an important equalisation component. The subsidiarity principle (sovereignty) which is part of the Swiss Constitution embodies this federation. Subsidiarity essentially means a bottom-up funding approach in Switzerland, but this federation has also become more centralised with subnational revenues now constituting only a 35,5% share in total revenues.

The Swiss federation dates back to the Everlasting Alliance of 1291 when three cantons formed a union to resist Hapsburg rule. In 1815 the present Swiss Confederation was constituted, and in 1848, a formal federal constitution was adopted and which has been amended several times since. There are three levels (federal, state cantons and local communes) of government. The country is composed of 23 cantons, of which three are divided into half cantons. These cantons are of unequal size, topography and economic potentials. Cantons are legally sovereign states unless their sovereignty is explicitly limited by the Constitution. There is a municipal substructure of about 3 000 communes which act under cantonal control. Since the cantons may delegate government functions to their communities in varying degrees, it is best to treat the state level in Switzerland inclusive of communal services (and revenues). The country is characterised by a heterogeneous society where the protection of minority groups, the preservation of cultural diversity, mutual consideration and assistance, and care of the environment are key attitudes.

Main responsibilities are assigned to each layer of government by means of the Swiss constitution. The exclusive responsibilities of the Confederation are in defence, citizenship and the status of foreigners, political asylum, civil and penal law, social protection, policies on property, economic order, money and currency, energy policy, national transportation and telecommunication. The exclusive responsibilities of the cantons are in the maintenance of public order, public welfare, establishments of health care, schools and education, the relationship between state and church, regional and local land planning, highways as well as the use of water and other resources. In all further domains (health, protection of the environment, culture, fostering of research, science and arts, universities and vocational education) there is a presumption in favour of canton responsibilities unless federal law assigns functions otherwise. The division of responsibilities is, however, not easily discernible from the budget or financial accounts and is not fully reflected in the structure of government expenditures. The extensive network of payments, subsidies, incentives, joint financing, and delegation of responsibilities that has evolved over the years tends to dissolve authentic public expenditure authorities and to blur accountability.

Taxing powers are clearly separated by the Swiss constitution. At present the vertical assignment of taxes in Switzerland is as follows (Spahn 1997):

- (1) Indirect taxation on expenditures, excises and custom duties are exclusively federal.
- (2) Tax bases of direct taxes on personal income and wealth, as well as business income and wealth are concurrently exploited by all levels of government, including municipalities, with priority given to the cantons.
- (3) Each level of government is endowed with a full or partial tax authority for a number of taxes and not only one, and cantons and communes also have the right to levy user charges and fees for certain services where it is appropriate.
- (4) Cantons have the exclusive right to tax motor vehicles.

Although the cantons do not depend much on federal transfer payments and benefit from a fairly high degree of fiscal autonomy, tax sharing is still applied. Tax sharing is often portrayed as a way to compensate the cantons for the loss of their tax sovereignty which was transferred to the Confederation in the constitution. Competing taxing powers at the different levels of government and the complexity of fiscal federal arrangements creates fiscal problems such as tax competition, coordination (harmonisation) in Switzerland. The extensive freedom in shaping the tax system enables each canton to determine the tax price level for a specific bundle of public goods and services within its own jurisdiction. Kirchgässner and Pommerehne (1996) argue that tax competition has an influence on the spread of high-income individuals over the cantons, and is partly capitalised in dwelling rents. Also, the equalisation of differences in taxable capacity through asymmetrical vertical grants by the central government seems to be important to enable cantons to provide similar levels of services without forcing them to levy taxes that are significantly more onerous than in other cantons. Borrowing is permitted only for investment purposes on a pay-as-you-use basis.

## APPENDIX D: MAIN FISCAL CHARACTERISTICS OF THE EU

### D.1 THE MAASTRICHT TREATY

European unification has reached the penultimate stage in a process of regional integration: an economic union. Although not yet finalised, it would seem that in future tax cooperation (also on a global level) will become an important link in determining to what extent member countries will agree on a political agenda. Although not institutionalised, the European Council with governmental representatives from all EU members is seen as the highest policy-making body and advises the Council of Ministers and the European Commission (see *The Economist* 2000 for a detailed account of the different institutional powers). Since 1993, the Single European Market (SEM) preceded by the European Common Market (ECM), and the Economic and Monetary Union (EMU) have been established as part of this process. In terms of tax competition, the SEM is an internal market with, in principle, free movement of capital, labour, consumers, goods and services. The EMU, with its fully integrated capital market, adds to the mobility of capital by the reduction of transaction costs. The EU philosophy is underlined by the subsidiarity principle. Introduced by the Maastricht Treaty in 1992, this principle expresses the presumption that the primary responsibility for public policy lies in the hands of the EU members, unless better provided by a higher level of government (eg vertical coordination). At the same time it recognizes that these members are not ready to yield more fiscal authority to the EU than they already do.

The EMU will not have a central fiscal authority. This is similar to most existing monetary unions such as the CFA franc zone and the currency union between Belgium and Luxembourg, but distinct from sovereign federations in which currencies and nations coincide. Although monetary and exchange rate policies will be fully centralised, fiscal policy will remain largely a national responsibility, in line with the subsidiarity principle. Fiscal policies will be coordinated through multilateral surveillance of national fiscal policies, with ceilings for budget deficits and public debts in terms of the Stability and Growth Pact (SGP) outlined by the Maastricht Treaty (articles 103 and 104c, 1993). The Maastricht Treaty therefore represented the agreement among EU countries to work towards a full economic and monetary union. It also represents the convergence criteria that candidate countries are required to meet, including the restriction on a



prospective candidate country's fiscal and monetary policies. The EMU convergence criteria therefore include the following: (1) Inflation should not exceed that of, at most, the three best-performing states by more than 1,5% (over the preceding 12-month period); (2) The nominal long-term interest rate (measured as an average over the preceding 12-month period) must not exceed that of, at most, the three best-performing states in terms of inflation/price stability by more than 2%; (3) The fiscal deficit must not exceed 3% of GDP in normal circumstances (exceptional circumstances are allowed, for instance, if the GDP decline is less than 2%) and financial sanctions such as nonremunerated deposits, may be imposed if members do not abide by this rule; (4) The gross government debt must not exceed 60% of GDP, although the Treaty provides for some flexibility in assessing compliance with past progress; and (5) The exchange rate must have respected the normal fluctuation margins in the ERM for at least two years with the EMS, and not have devalued its currency's bilateral central rate against any other EU member's currency.

One of the main arguments in favour of these fiscal constraints includes the potential for bailouts (or inflationary financing of deficits) by the European Central Bank, making it a so-called "commons" problem. The constraints or criteria are a condition for accession, and once countries part of the EMU, they might lose interest in complying with the criteria. New arrangements and institutions, however, can be formed to sanction irresponsible behaviour by national governments, allowing effective coordination of fiscal policies at the EU level while preserving subsidiarity (Hemming & Spahn 1997). This can, for instance, clearly be observed from the Treaty of Nice (2000) which among other things, considers majority votes and the accession of Central and Eastern European countries (CEECs).

## **D.2 ALLOCATION AND REDISTRIBUTION IN THE EU**

The main fiscal functions within the existing institutional framework of the EU are assigned differently from the federations already discussed. Allocative efficiency, that is tax neutrality, is pursued mainly through: (1) the establishment of the common or single market (at first the Treaty of Rome, 1958 - later enforced as the Single European Act of 1987, sometimes referred to as the "constitution" of the EU) which involves the removal of fiscal frontiers and mutual recognition of national standards, norms and procedures (eg procurement and accounting), that is a process

of horizontal coordination; and (2) the harmonisation of indirect taxes with direct taxes in a process of harmonisation, while leaving other taxes to spontaneous harmonisation (Kopits, 1992). Tax neutrality basically requires that the effective tax rates in the EU, specifically on capital income, should be approximately the same. The redistribution and stabilisation functions are left largely to EU members, with the EU budget providing for some limited redistribution through structural funds (aimed at financing regional and social policies designed to raise employment levels and close income gaps among EU regions, the Cohesion Fund and the Common Agricultural Policy [CAP]). The Maastricht Treaty established the Cohesion Fund to channel financial assistance to the four poorest members - Greece, Ireland, Portugal and Spain - and the fund thus exists to address the potential worsening of regional disparities. The EU budget therefore performs some interregional redistribution mainly through its structural funds, whereas interpersonal redistribution and social security are left to member states.

In 1996, three countries (Greece, Portugal and Ireland) received four and a half times more than they contributed whereas Germany and The Netherlands received only half of what they contributed (EC 1998). In 2001, the relationship did not change much. Germany contributed the lion's share of 11 700 Euro; Britain was next with 5 400 Euro; The Netherlands, Sweden and France each contributed 1 800, 1 200, and 1 000 Euro respectively. In respect to the EU spending (all in Euro) of these funds, it looked as followed, viz: (1) 3 billion to the Pre-accession aid to EU applicants; (2) 5 billion to Administration and 5 billion to Non-EU development and aid projects; (3) 6 billion to R&D, energy, transport, and education; (4) 32 billion to Regional aid within the EU; and (5) 46 billion to the CAP (The EC 2001). In relation to the smallness of the EU budget, the contribution of members (revenues) delivered a modest redistributive effect compared with the impact of the federal budget in Canada, Germany or the EU.

The redistributive effect in the EU was estimated at between 0,5% and 3% in terms of the reduction in the differential of national per capita income to the national European average (Bayoumi & Masson 1995). In contrast, the federal budget provided a redistributive effect estimated between 19% and 22% in the US, and between 39% and 53% in Canada and Germany. The EU structural funds reduced disparities in interregional per capita income by only 2,5% whereas the interregional transfers by the federal budget in Germany reduced disparities by 5,2%, in terms of the Gini index (see Costello 1993). EU members, and regions within them, are

therefore still characterised by wide discrepancies in the different levels of income. In 1997, the 10 most prosperous regions were three times as rich as the poorest ten, and member states' GNP per capita ranged from an index of 46 (Portugal) to 137 (Denmark) and 186 (Luxembourg).

### **D.3 TAXATION AND MACROECONOMIC STABILISATION IN THE EU**

The flexibility of the SGP is constantly being questioned in terms of its ability to ensure macroeconomic stability. Hence, there is a clear division in thought regarding the stabilisation function in terms of the EU. Some argue in favour of a separate EU budget (centralised approach) to achieve the necessary outcome, while others argue in favour of the current decentralised approach in the EU. Clearly, automatic stabilizers also become part of the discussion.

The effectiveness of automatic stabilisers in federations such as Australia, Canada, Germany and the US is, however, well established. Various studies have also been conducted in this field (see McKinnon, 1997). The normal tendency in the case of a local recession is that federal taxes paid by local residents are reduced, and federal transfers (both personal and interregional) are increased, thus leading to a counter-cyclical effect. Two factors are important in this regard, namely (1) the size of automatic stabilizers, and (2) the ability of member states to handle tensions between targeting the fiscal position and stabilising output.

The magnitude of conventional automatic stabilisers is likely to have diminished over time in the EU. Tax reforms have generally flattened tax systems by cutting marginal rates. Further, increased reliance on consumption relative to income as tax base, implying a decline in the role of revenues collected from the corporate sector (see sec 4.4), has reduced the responsiveness of the tax base to output fluctuations. The expenditure share that is cyclically sensitive may also have been reduced by improved targeting of social assistance programmes, and reduced replacement ratios of pensions and unemployment benefits. The most important factor for fiscal stabilisers does, however, still remain the size of tax revenues in the economy. Countries with low taxes relative to GDP (eg Japan, the UK, the US and Australia) have low automatic stabilisers from the revenue side, while those with a high tax share (eg Denmark, the Netherlands, Norway and Sweden) have higher stabilisers (OECD 1991).

Cangiano and Mottu (1998) argue that two other factors may also have led to the reduction in automatic stabilisers: (1) Despite the relatively expansionary fiscal policies in the EU during the early 1990s, partially Ricardian consumers may have anticipated higher taxes, with the third stage of the EMU approaching, and consequently may have increased their savings; and (2) Financial markets responded to high deficits by charging risk premiums. Both of these factors could have contributed to reducing the macroeconomic effect of fiscal policy through the emergence of non-Keynesian effects on demand. In addition, international trade has increased the EU members' economic openness, thus reducing the effectiveness of domestic stabilisers.

The second factor as observed in the beginning of this discussion, namely the ability of EU members to handle the tensions between targeting the fiscal position and stabilising the output, also become a victim, in this case the SGP. A country seeking to stabilise output would welcome cyclical sensitivity in its budget, while one pursuing a fiscal deficit target would be assisted by a budget that is relatively insensitive to output changes. In order to pursue output stabilisation (expansionary phases), strong fiscal stabilisers are therefore needed which, in turn, means an unstable fiscal position (higher budget deficit than the SGP rule). More recently, countries such as Germany did not reach the EU's deficit target, mainly because of the continued demand for the upliftment of East Germany. The problem further expands with large income disparities existing between Germany and countries to the East of Germany intending to join the EU. Germany has therefore extracted a concession from the EC which entails a seven-year restriction on the free movement of labour because of a fear that an enlargement of the EU will cause an influx of job seekers. It is therefore obvious that various factors will have to be considered in achieving macroeconomic stability.

## APPENDIX E: MAIN FISCAL CHARACTERISTICS OF ARGENTINA, BRAZIL AND INDIA

### E.1 ARGENTINA

Argentina is a federal state with a central or national government, 23 provinces and 1 617 municipalities (*municipios*). The country's history points to progressive centralisation of power in the hands of the national government over public expenditure as well as tax collection that has given rise to increasingly prevalent "vindication politics" among provincial governments and towards national government. The results have been weak autonomy for the lower levels of government; inequity among provinces; increased, competing demands by different jurisdictions; and a lack of autocorrection mechanisms, which depend on central government action because of the marked vertical imbalance (Murphy & Moskovits 1999:121).

During the first period of institutional organisation (1853-1890), the criteria governing tax-raising powers were the predominant issue. The nation consequently retained the revenues from foreign trade and the indirect taxes that it collected in the federal capital and national territories. Provincial financing depended on the provinces' capacity to collect their own taxes. Between 1890 and 1935, increased public sector functions such as education, justice, health and defence created a need for new resources. During the 1930s, income tax, sales tax and shared taxes between the national government and the provinces that introduced a federal tax coparticipation were introduced. The system of revenue sharing consolidated as time passed, acquiring greater weight in financing provincial spending and a greater share of total tax receipts. The constitution therefore describes the functions of the different levels of government in terms of expenditures and revenues.

Fiscal responsibilities are distributed geographically according to criteria explicit for the national government and implicit for provincial governments. The provinces have exclusive powers (those not explicitly delegated to federal government), concurrent powers (those exercised simultaneously with national government), and superseding powers (which must abide by federal regulations). The general rule gives the provinces jurisdiction over functions not delegated to the national government, whose powers cover international and interprovincial relations and

regulations. The constitution limits itself to assigning responsibility for organising and guaranteeing municipal systems to the provinces. At first municipalities were seen as autarchic entities organised along territorial lines that should apply the norms set out by higher levels of government. In more recent times, some provinces have adjusted their constitutions to recognise municipal autonomy, that is the power to determine their own governing norms, especially for management. Recent Supreme Court rulings guarantee municipal autonomy but only to a certain extent, and the present definition of municipal powers is therefore somewhat confusing. This represents a serious obstacle to setting municipal regulatory powers, because if they are autonomous units, their powers to regulate matters hitherto not within their jurisdiction must be recognised.

The national constitution allocates taxing powers to both the centre and the provinces. In principle, the law supports their separation, but in reality they have been concentrated in the hands of the national government, which legislates and collects the lion's share of taxes (VAT, income tax, specific commodity taxes and fuel levies). The federal government has exclusive powers over import and export duties and direct taxes (capital income taxes) "for a limited time".

The nation and provinces have concurrent powers over indirect taxes (commodity taxes). The provinces "maintain all powers that are not delegated" to the federal government and could thus impose permanent direct taxes. The latter is a power restricted in practice because direct taxes imposed by the nation have taken on a permanent character through constant renewal by law. The provinces therefore legislate, manage and collect four main types of taxes and other minor ones. The first group consists of a turnover tax (sales tax), stamps, automobile registration and real estate taxes. The latest federal-provincial fiscal agreement established a retail sales tax or a VAT to replace the turnover tax over time (see sec 5.4). Two of the more important taxes (automobile registration and real estate) have relatively fixed tax bases which impede tax exportation and restrict the possibility of "tax wars" and Tiebout's "voting with one's feet".

The constitutional reforms of 1994 prospectively gave the revenue-sharing regime constitutional weight for the first time and established a general framework. It will therefore acquire higher status than it currently enjoys. This guarantees, for instance, that funds will automatically go to the provinces and their primary and secondary distribution "will be directly correlated with the jurisdiction, services and functions of each province and will reflect objective sharing criteria",

which will show “equity (and) solidarity, and will give priority to achieving an equivalent level of development, quality of life, and equality of opportunities in the whole of the national territory” (Murphy & Muskovits 1999:102). An ongoing problem therefore involves the provinces’ loss of tax-raising powers to the central government. The provinces have had no incentives to collect taxes largely because of the revenue-sharing scheme, their opportunities to acquire debt (in the past through national banks, suppliers and rediscounts) and the near certainty of bailouts in the event of default.

Other constitutional reforms are also relevant to the federal revenue/tax-sharing system. They include Buenos Aires as an independent jurisdiction. The revenue-sharing law will originate in the Senate, where all provinces are equally represented, so that smaller jurisdictions will enjoy relatively greater influence in negotiations. Transfers of services and responsibilities between the nation and province will be restricted unless accompanied by the corresponding funds and the legal consent of representatives of both levels of government. A federal fiscal entity will be created to control fiscal relationships between the nation and the provinces; it will include representatives of each province and Buenos Aires, although the presence of a national representative is not mentioned. The federal government’s powers to modify taxes subject to revenue sharing through specific allocations (pre-co-participation) have been increased, although these measures will require absolute majorities in both houses. For municipalities, the debate on autonomy versus autarchy will directly influence whether or not they have taxing powers. As autarchic entities, they could charge fees for services but not collect taxes. If current judiciary trends continue, nothing in the constitution disallows taxation at the municipal level and these powers will depend on provincial legislation.

In 1999, the Law of Fiscal Solvency was introduced and required the federal government to maintain a balanced budget from 2003, and also to ensure that spending does not run ahead of economic growth. It also established a stabilization fund to mitigate the impact of the economic cycle on the budget. By 2001, it became clear that this objective would not be achievable by 2003. Argentina defaulted on its debt burden and it was predicted that unless the public sector restructured the public sector and agree on new revenue arrangements with the provinces, the benefits of the IMF loans would be short-lived (The Economist 2002:85).

## E.2 BRAZIL

Brazil has a central government (Union), 27 states and 4 974 municipalities (*municípios*). Brazil is one of the most decentralised federations in the developing world (De Mello 1999:135). Brazilian fiscal federalism is therefore characterised by a great autonomy of subnational governments. The latter, which includes the diversity of tax sharing and transfer arrangements (both negotiated and statutory), makes intergovernmental relations institutionally complex. Further complications include sizeable regional and personal income disparities as well as a long history of macroeconomic instability and chronic inflation. The 1988 Constitution, however, generally brought constitutional arrangements in Brazil generally into line with broad expenditure assignment principles in economic theory but cross-level coordination and service delivery practices still posed additional problems. These included no clear division of responsibilities across the levels of government which led to the duplication of expenditure assignments. However, reforming the structure of intergovernmental relations towards the decentralisation of expenditure assignments in line with the overall fiscal decentralisation effort in recent years and the removal of quasi-fiscal imbalances (ie a lack of transparency between fiscal and monetary authorities) could ensure tax equity and the consolidation of macroeconomic stability. An additional difficulty arises because macroeconomic stability is pursued within the context of fiscal decentralisation and complex intra- and intergovernmental relations.

The drastic reduction of inflation with the implementation of the Real Plan in 1994 led to a transformation process in the working of federation and public finances in Brazil (see also Piancastelli de Siqueira 1998:173). The latter became a reality because the fiscal stance of the Union started to deteriorate. This was reflected in a loss of quasi-fiscal sources of revenue with the fall in inflation (eg a loss in seignorage revenue) and a rise in various types of quasi-fiscal expenditures (eg costly bailouts and expensive sterilisations of capital inflows). De Mello (1999) therefore argues that fiscal policy and consolidation are particularly important if the costs associated with excessive reliance on monetary policy are to be minimised and self-sustained growth is to be achieved. In 2000, a Fiscal Responsibility Law was approved and required each level of government to maintain their balance at the level that it was at that specific stage, limit their spending on personnel, and keep the ratio of debt also to the level that it was at that stage within limits set by the Senate, on the President's Proposal. Brazil will, however, have to be



much more disciplined than their neighbour, Argentina, in the application of their Acts in future, if it is to prevent them from falling into the same kind of debt trap.

In terms of a sustained level of macroeconomic stability, policies must also promote increased harmonisation of indirect taxes across trading nations in view of recent trends in international economic integration and the creation of trading blocs. Greater economic integration therefore increases the scope for increased tax sensitivity and tax competition between countries. This is particularly important for Brazil, given the increased opening of its economy and greater integration within MERCOSUR (see sec 5.4). International competitiveness can therefore develop into a system of indirect taxation that discourages selective, essentially cumulative, multistage taxes on sales and corporations' gross revenue.

### **E.3 INDIA**

At present, India comprises of a Union, 25 states and 7 union territories, and 3 586 urban local bodies and 234 078 rural local bodies. The urban local bodies are subdivided into 95 municipal corporations, 1 436 municipal councils, and 2 055 *nagar panchayats*. The present system of fiscal federalism in India has been formed in the pre-independence government of the India Act of 1935. India, which is the largest democracy, has sharp regional diversities and a heterogeneous population. The only way that efficient delivery of public services can be achieved is through the decentralisation of powers and functions of government. The Indian constitution which came into operation in 1950 emphasises that matters of national interest are with the "centre", while those relating to the provision of public services (eg the maintenance of law and order, justice, education and health) are with the states. The centre is therefore responsible for the maintenance of development and stability through several developmental, international and monetary instruments (eg currency, coinage, foreign exchange, external trade, etc). However, the source of financing of state services in particular has not always been adequate.

The constitution emphasises the principle of tax separation between the states, and the central government and sources of taxation assigned to the central government or the states are listed as well as the taxes to be shared. The states have considerable power over revenue sources assigned

to them and although they can determine the tax base, the most productive sources of revenue have been reserved for the central government. The central government has the power to levy income tax on nonagricultural income (individual and corporate), customs duties and excise taxes on production with the exception of those on liquor. Tax revenues assigned to the states cover those related to land and agriculture (land revenue, agricultural income tax, etc), sales taxes with the exception of those on interstate trade, excises on liquor, taxes on inland transport except for railways, property tax and the entry tax. According to the constitution, taxes on the non-agricultural income of noncorporate entities should be distributed between the centre and the states.

Some of the problems experienced by the Indian fiscal federal system can be summarised as follows (Bagchi 1997):

- (1) There were trends between the levels of state and federal government expenditure. For instance, between 1960 and 1961 and 1993 and 1994 the taxes and other revenues raised by, and otherwise accruing to, the states increased from 59% of the national total to 64%. Because of this, the states incurred significant deficits as well as a larger devolution of expenditures after the mid-1970s. The deficit led to questions being asked whether the assignment of expenditures and revenues was out of balance or whether the system of *transfers* ("gap-filling") itself was flawed. Large devolutions out of specific revenue seemed to act as a disincentive for the centre to raise more revenue and as an encouragement to turn instead to nonshared categories of taxation to meet the centre's own requirements. Rising grants encouraged states to expand capital expenditure and led to a neglect of the maintenance of existing assets.
- (2) *Horizontal equalisation* has only been partially achieved through the transfer system. The richest states in India achieved own revenue per capita that was up to 5,2 times higher than that of the poorest states and a revenue: expenditure ratio that was 2,3 times higher. This can be compared to a per capita income differential of 3,1 between the richest and poorest states. Attempts at equalisation did not help and gaps only widened because tax devolution constituted the main component in the transfer system and overshadowed the grants in that regard. The equalising characteristics of devolved taxes were also much weaker than those of the grants.
- (3) The *overlapping* tax jurisdictions of the centre and the states concerning excise and

sales taxes have become a serious problem. The result has been a considerable concentration of central sales tax (CST) revenues: 40% of total collections went to only four states, which accounted for only 20% of India's total population (approximately 1 billion people). This could lead to competitive actions and distortions such as camouflaging interstate sales as transfers on consignment to branches or depots of the same company. These complexities and competition associated with the separation of powers to levy domestic trade taxes have been unfavourable for the development of a more effective common market in India.

From the aforementioned discussion, it is clear that the principle of "financing follows function" has not been properly implemented within India and that the division of powers between the central government and the states has been obscure. This can be linked to a few factors. Firstly, although the constitution provides considerable fiscal and regulatory power to the states, substantial unitary features are still present. The central government can dissolve state governments and take over their administrations. Secondly, central planning (which until recently governed India's economy) blunts the economic powers of the states. Thirdly, national parties traditionally dominated subnational politics and therefore state budgetary outcomes were the result of centrally defined development policies, and in practice, state-level regulatory powers had little meaning.

The relative centralisation of India's federation is, however, changing. Central planning is gradually weakening and the growing strength of regional parties in national coalition governments allows the states a greater role in defining their development priorities. The adjustment process of state governments will, however, be a slow process especially because state finances are problematic with excessive debt and unsustainable wage and pension bills, and few incentives to mobilise their own resources. States have also only progressed gradually in implementing the 73<sup>rd</sup> and 74<sup>th</sup> amendments (1992), which gave constitutional recognition to local governments. Although states have the power of supersession, that is the right to dissolve a local government and take over its powers, they are now required to hold elections within six months of superseding a local government (World Bank 2000:110).

## **APPENDIX F: THE SADC AND OTHER REGIONAL GROUPINGS IN SOUTHERN AFRICA**

The Southern African Development Community (SADC) was founded in 1992 as a successor to the former Southern African Development Coordination Conference (SADCC), which was established in 1980. The SADCC originally had nine members (Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe). One of the main aims of the SADCC at that stage was to make member economies less dependent on South Africa, a country that was then plagued by sanctions because of its unacceptable political and social policies.

Even after change occurred at the beginning of the 1990s and sanctions were subsequently reduced, South Africa was still not allowed to re-enter the SADC because of another “fear” that it would become a dominant power. South Africa was, however, allowed to re-enter the international playing field after major political and social reforms led to a fully democratically elected Government of National Unity in April 1994. After this period of change, South Africa was allowed to join the SADC as the eleventh member, after a newly independent Namibia had joined in 1990. Mauritius was the next country to join in 1995, followed by the Democratic Republic of the Congo (DRC) and Seychelles in 1997. The SADC has 14 members at this stage with a total population of approximately 192 million people.

Whereas the SADCC’s main task was to coordinate the development programmes of member states, the SADC’s was to pursue the integration of development and the liberalisation of economies in the region. The declaration and treaty for the formation of the SADC was signed in Namibia in August 1992. The objectives of the SADC are briefly as follows (SADC 1992): (1) the enhancement of development and economic growth and the standard of living of Southern Africa in order to support economic integration; (2) productive employment and the utilisation of resources of the region; and (3) the sustainable utilisation of natural resources and effective protection of the environment. The SADC will, in order to achieve these objectives, harmonise political and socioeconomic policies of member countries, mobilise people to the benefit of the region and develop policies aimed at the elimination of obstacles to the free movement of capital and labour, goods and services and people of the region.

The heads of state of the SADC countries form the main policy decision-making body of the organisation. Summit meetings are held at regular intervals (sometimes every six months) to give direction to the policy and activities of the organisation. The Council of Ministers, mainly Ministers of Foreign Affairs, meet once a year to overview the progress made with the various programmes for the achievement of the objectives of the SADC. Sectoral Councils of Ministers have been formed to drive the process of different Protocols, aimed at more specialised activities. Each country in the SADC has been given responsibility for one or more of the Protocols. The SADC Secretariat in Gaborone, Botswana, is responsible for the overall coordination of all activities of the member countries. In each country, there are sector coordinators who must liaise with the Secretariat and Sectoral Secretariats to serve the various Councils of Ministers. Different countries are therefore responsible for the coordination of different economic sectors. Mauritius is responsible for tourism; Tanzania for industry and trade; Mozambique for transport and communication, and culture and information; Angola for energy; South Africa for finance and investment through the Finance and Investment Sector Coordinating Unit (FISCU); Zambia for mining; Malawi for wildlife; and Lesotho for environment and land management.

The Southern African Customs Union (SACU) is the oldest, and according to most accounts, the most effective and successful integration scheme within the SADC. Established in 1910, this group consists of five members, namely Botswana, Lesotho, Namibia, Swaziland (BLNS) and South Africa. The common goal of the group was to create a trade regime capable of achieving development in member countries. As already mentioned, all of its members (except Botswana's pula) are participating in a Common or Rand Monetary Area (CMA) which pegs member countries' currencies to the South African rand at a one-to-one rate.

#### **F.1 SOUTHERN AFRICAN CUSTOMS UNION (SACU)**

SACU is based on a revenue-sharing formula, allowing a common revenue pool. In terms of the SACU treaty, trade in goods and services (other than agriculture) within the Union is totally free of barriers, but imports from the rest of the world face a common external tariff (CET) and a common excise tax, the proceeds of which flow into a consolidated revenue fund. Revenue out of this fund is shared according to an agreed revenue-sharing formula. Botswana currently obtains 15% of its total revenue from SACU, making the country (excluding South Africa) least

dependent on the group. Namibia receives about 30% of its total state revenue from the SACU pool, while the figures for Lesotho and Swaziland are about 35%. The SACU treaty has been amended and agreed upon since September 2000 to include the following:

- (1) A more up to date and realistic revenue-sharing formula was introduced. Shares of the revenue derived will now be based on intra-SACU trade, which means that the more the country imports from others, the higher its share will be in the revenue fund – again favouring the BNLS group which is less industrialised than South Africa.
- (2) The SACU ministers agreed to set aside 15% of the total revenue from excise duties for developmental purposes. This portion will be shared in an inverse relationship, which means that the lower the income per capita, the higher the proportion from the 15% pooled money will be. In the EU, for instance, there is speculation about giving the supra-national authority more power to levy, say, *environmental taxes* to compensate for future environmental degradation. Some of the states that are *resource rich* in the more mature federations, notably Canada (Alberta), invest resource revenues (largely outside the resource sector) in such a way as to diversify the subnational economy. Although the Alberta trust fund was based on bad economics (McLure 1997:101), such a trust fund could be a good alternative, if invested wisely, for preserving revenues from national assets such as mining. Another more realistic alternative is therefore to go for the highest but still relatively safe return, as in the case of the US (Alaska) which invested revenues from oil in world capital markets.
- (3) There is a sharing of the remaining 85% that is to be shared according to the GDP or GNP, that is the higher it is, the higher the share will be.
- (4) The decision-making and tariff-setting regime has been democratised, that is a multinational secretariat has been created.

The new formula still provides for large transfers from South Africa to the BNLS, but has many advantages over the current method of revenue sharing. The new formula, unlike the existing method, is bound to the actual amount of customs and excise revenue collected. This will ensure that South Africa's share of the total customs and excise pool remains relatively stable over time (NTSA 2001:89). The above-mentioned agreements are therefore far from perfect, but have come a long way in accommodating the original guidelines (recommendations) that were laid down by the South African government in 1997. These guidelines can also be utilised to secure

future objectives, possibly developing into a communal objective for a future SADC FTA:

- (1) a further democratisation of the decision-making and tariff-setting regime
- (2) the adoption of a clean revenue formula to cover the price-raising effects of the CET
- (3) the general lowering of the CET to reduce factor prices thus increasing regional competitiveness and reducing anti-export bias
- (4) the harmonisation of industrial policy and incentives at regional level
- (5) the implementation of a competition law to counter what members referred to as South Africa's dumping and unfair trade practices.

Despite continuous adjustment within SACU, an ongoing debate questions whether there is still a future for bilateral agreements in Southern Africa and SACU within its current format. One of the stipulations of the agreement reached in September 2000 is that duties on most product inputs should be reduced to zero within three years. This reduction, together with the items that are already zero-rated, would imply that 69% of all trade would be liberalised within SACU in the next three years. The target is to have at least 97% liberalisation within five years with the remaining 3% comprising tariffs from sectors labelled as sensitive, that is the sugar and automotive sectors. Naturally these targets also correspond to the main aims of the Trade Protocol set by the SADC.

## **F.2 COMMON MARKET OF EASTERN AND SOUTHERN AFRICA (COMESA) AND REMAINING PROBLEMS**

The Preferential Trade Area for Eastern and Southern African States (PTA) was replaced by COMESA in December 1994. Despite the good intentions and the establishment of a clearing-house to minimise the use of scarce foreign exchange for internal transactions, the PTA did little to expand trade among its members. The objective of the newly formed COMESA is therefore once again to create a free trade zone that would evolve into a customs union with a CET by the year 2004 and into a common market thereafter. The future could see an enlarged SADC or COMESA and it may then become necessary to coordinate and join SACU and SADC objectives with those of COMESA. Regarding the SADC members that also belong to COMESA (Angola, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe), there is uncertainty about why these members continue to remain in both trading

blocs. Scepticism seems to drive the bias in choices (see Flint 2000). As already mentioned, history shows that SADC member countries tend to feel that South Africa is a dominant economic power and has an unfair advantage because of its relatively superior production technology and economic structure. Further, South Africa has been attracting most of the FDIs (sec 6.5) in the region and consequently emotions have run high stalling previous trade negotiations.

As already mentioned in chapter 5, one of the obstacles in African integration schemes has been that many countries have had overlapping and incompatible membership of different regional agreements with different mandates, trade tariffs and exchange control regulations. This is, however, also a tendency within other developing regions, such as Latin America (see appendix 1). In the case of the Latin American Integration Association (LAIA) all members already belong to another smaller grouping (ANDEAN PACT, G-3 and MERCOSUR) and it is generally accepted that the increase in intra-LAIA trade since 1990 is attributable to the formation and/or revival of these other, smaller groupings within LAIA than to LAIA itself (World Bank 1998). The SADC is in the same position, with members belonging to numerous other regional agreements besides the SADC. Within the 14-country membership the following are evident:

- (1) a customs union (SACU) incorporating South Africa, Botswana, Lesotho, Namibia and Swaziland), of which four members are tied into a monetary arrangement that integrates the smaller economies into the South African money and capital markets
- (2) members of the Common Market of Eastern and Southern Africa (COMESA) which in some respects has made good progress in trade liberalisation
- (3) seven SADC members which participate in the Cross-border Initiative (CBI) which seeks accelerated economic liberalisation through the creation of an environment where the private sector would participate in a subregional rather than a national context so that scarce investment capital for growth can be attracted
- (4) the EU-SA FTA between the EU and South Africa from 1999
- (5) other bilateral trade agreements between member countries such as South Africa and Malawi (particularly on textiles and apparel) that can assist in the formation of the SADC FTA because trade deflection and hence the need to incorporate adequate rules of origin becomes important



The SADC technical arm spearheading trade negotiations, the Trade Negotiating Forum (TNF), has agreed on the various policies that are required to underpin implementation of the Trade Protocol. It recognises the need for harmonisation and includes the following (FISCU 1999):

- (1) the need for *macroeconomic stability*
- (2) the need for harmonised investment policies and incentives to avoid use of revenue receipts in *competing for investment*
- (3) the need to *diversify* as well as specialise in certain product lines where there is *comparative advantage* within member states and the region
- (4) policies on *technology transfer* in order to improve productivity, quality and enhance competitiveness with the rest of the world
- (5) liberalised *exchange controls* to facilitate trade transactions
- (6) improved *payments, clearance and settlement* systems to enhance speedy transfers
- (7) harmonised *customs procedures and standardized* customs declaration and transit documentation
- (8) *industrialisation policy* to ensure equitable development in the region

The ultimate goal of the Trade Protocol of 1992 is therefore to implement a full FTA by the year 2006, and to promote a future common market.

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